

[illegible]

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SIZE A3	CODE CS	DOC. NUMBER 6050A2314301	REV X01
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CHANGE by **ST133ID** **18-Aug-2009**

Inventec Confidential

Arrandale
(Socket-rPGA989)

DDR3 SO-DIMM 1
P22

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ATI PARK
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DDR III
VRAM
64M X 16

DDR III
VRAM
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DDR III
VRAM
64M X 16

DDR III
VRAM
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(HM55)
(6019B0713401)

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System Charger
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P05

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TITLE			
ST133i Block Diagram			
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VGA

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PCIE

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SMSC EMC1412
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SPKR
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HP JACK
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int DMIC
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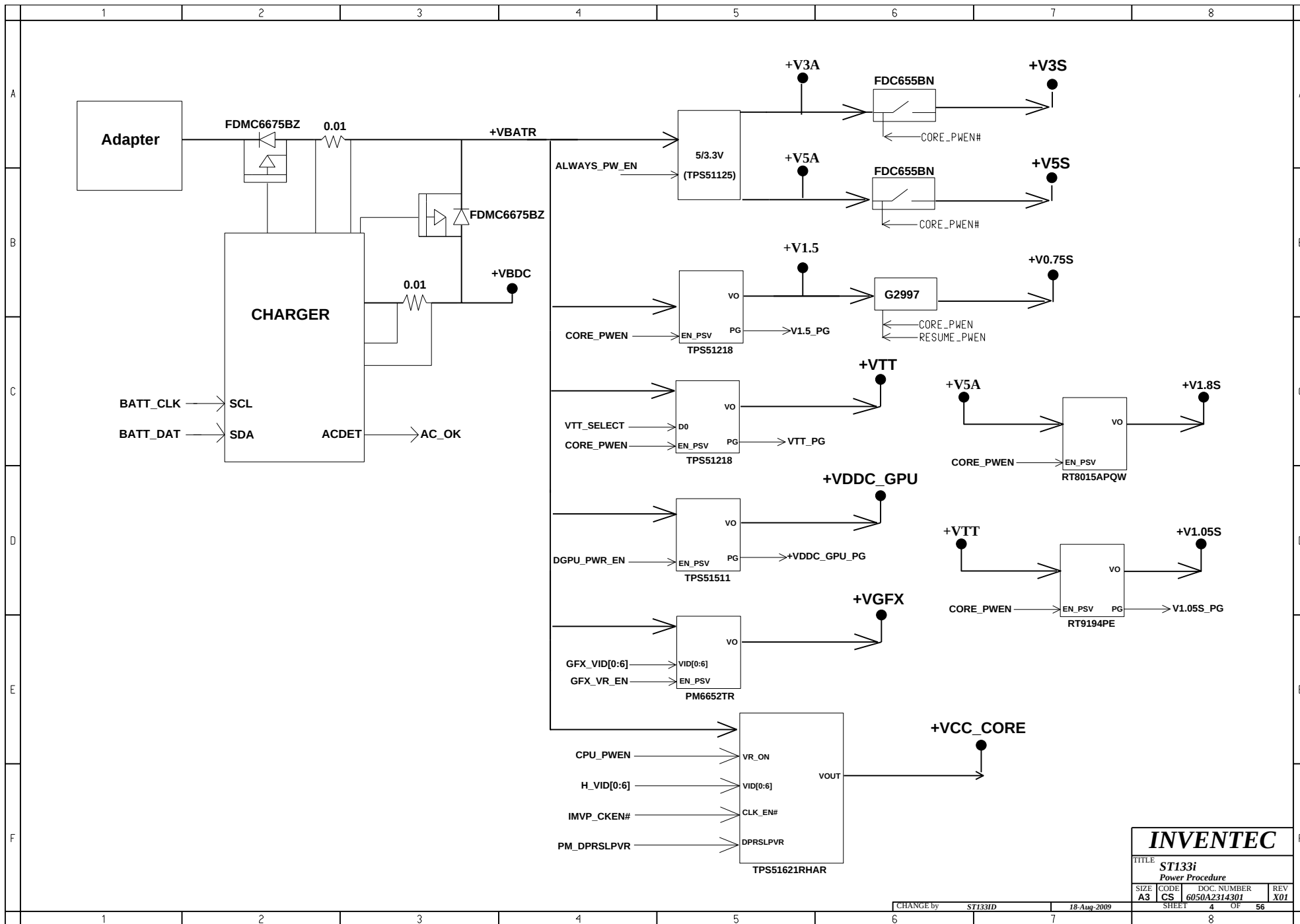
IDT 92HD80
AudioCodec
P42

ITE IT8502E
KBC
P33

**SPI ROM
EC FW
(BIOS)**
P33

Keyboard
P34

Touchpad
P34

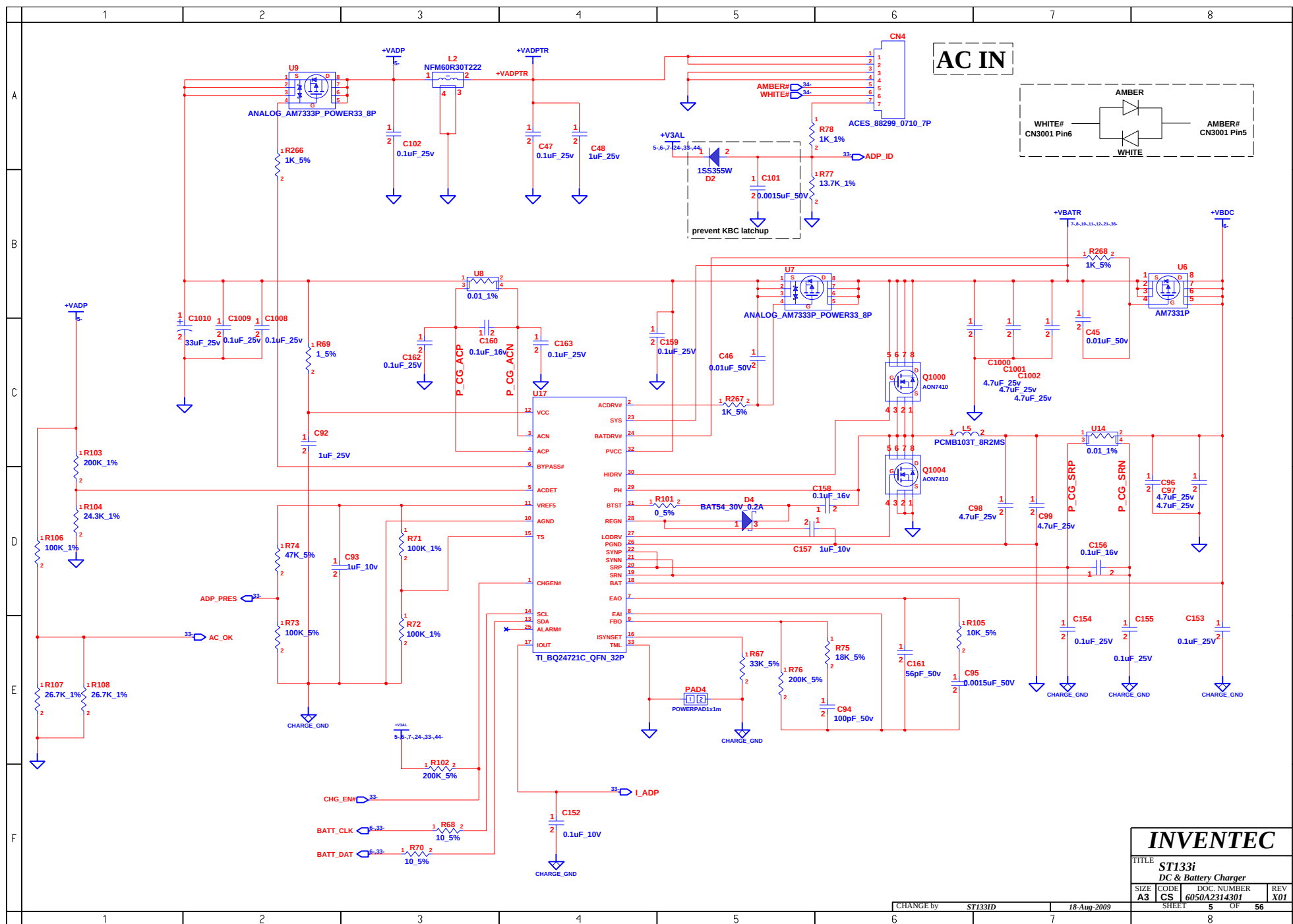


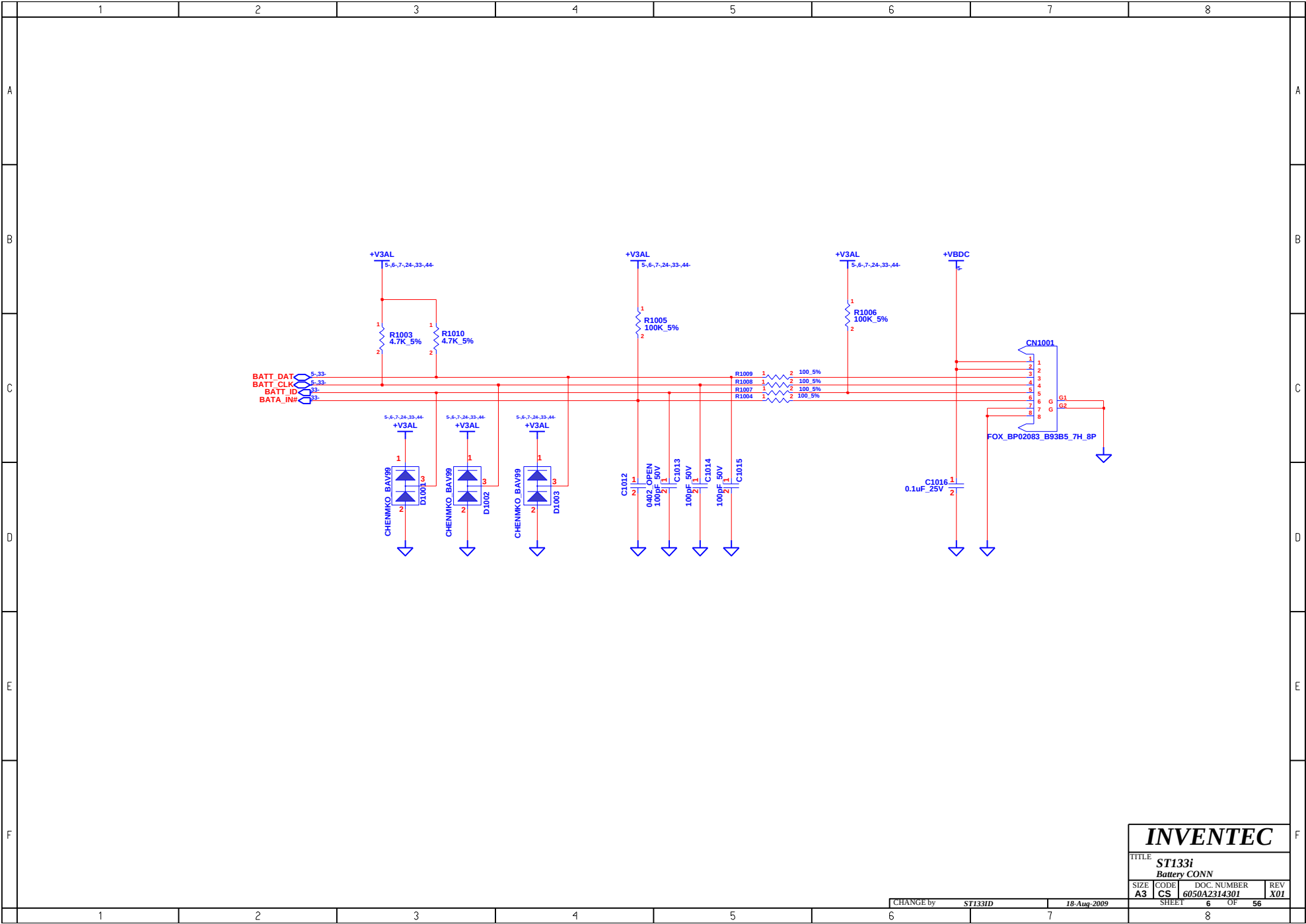
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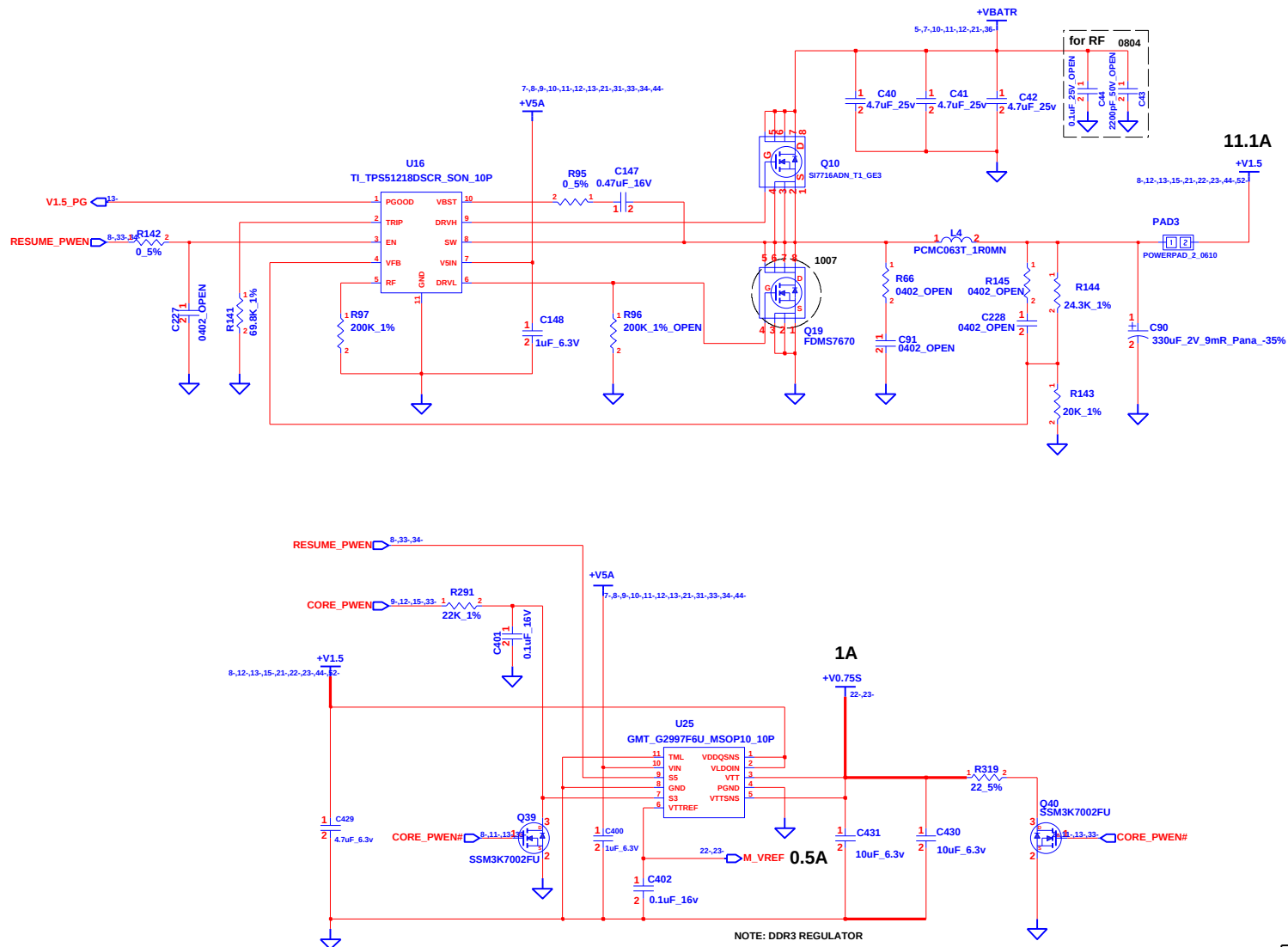
TITLE			
ST133i			
Power Procedure			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01

CHANGE by ST133ID 18-Aug-2009

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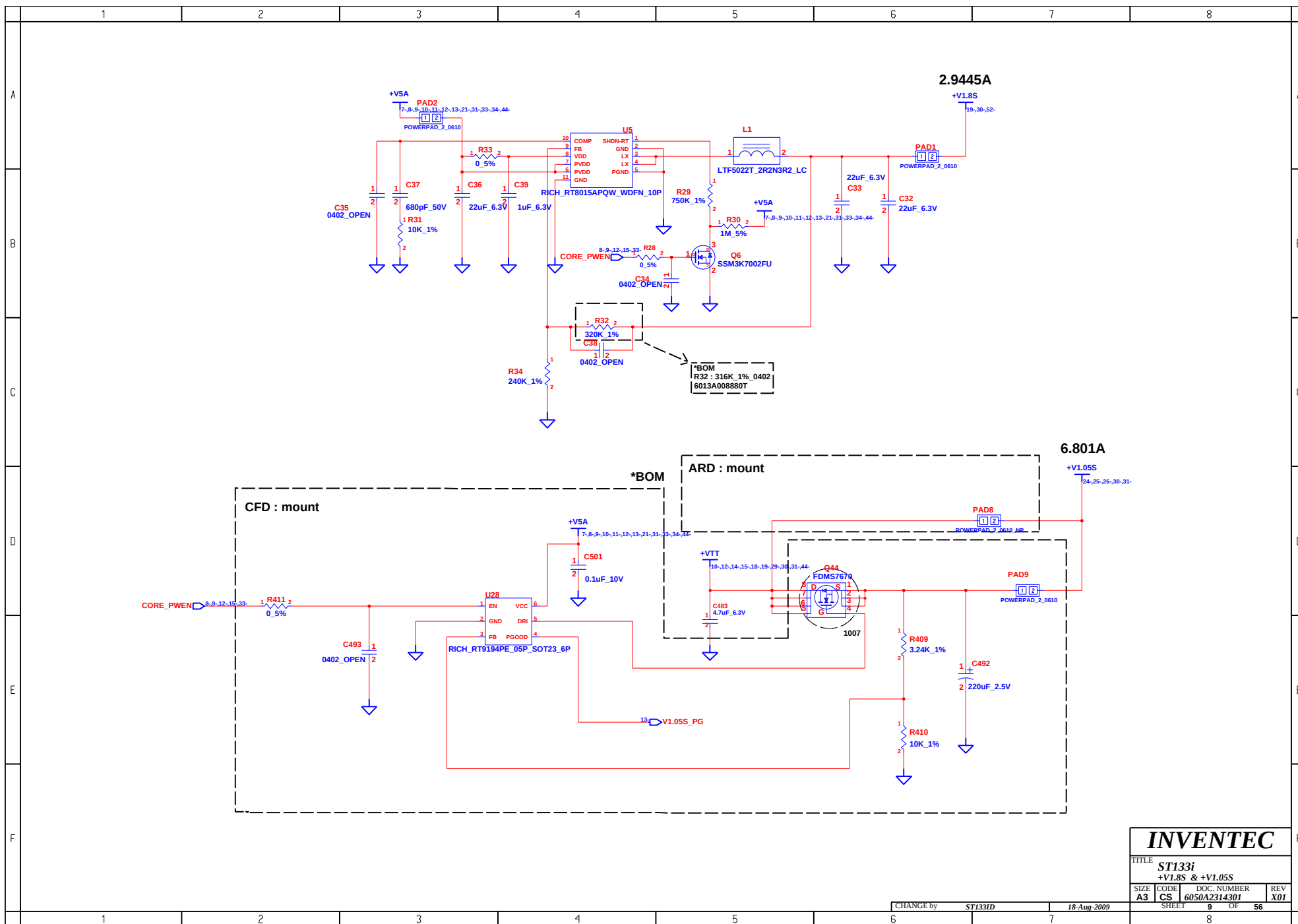


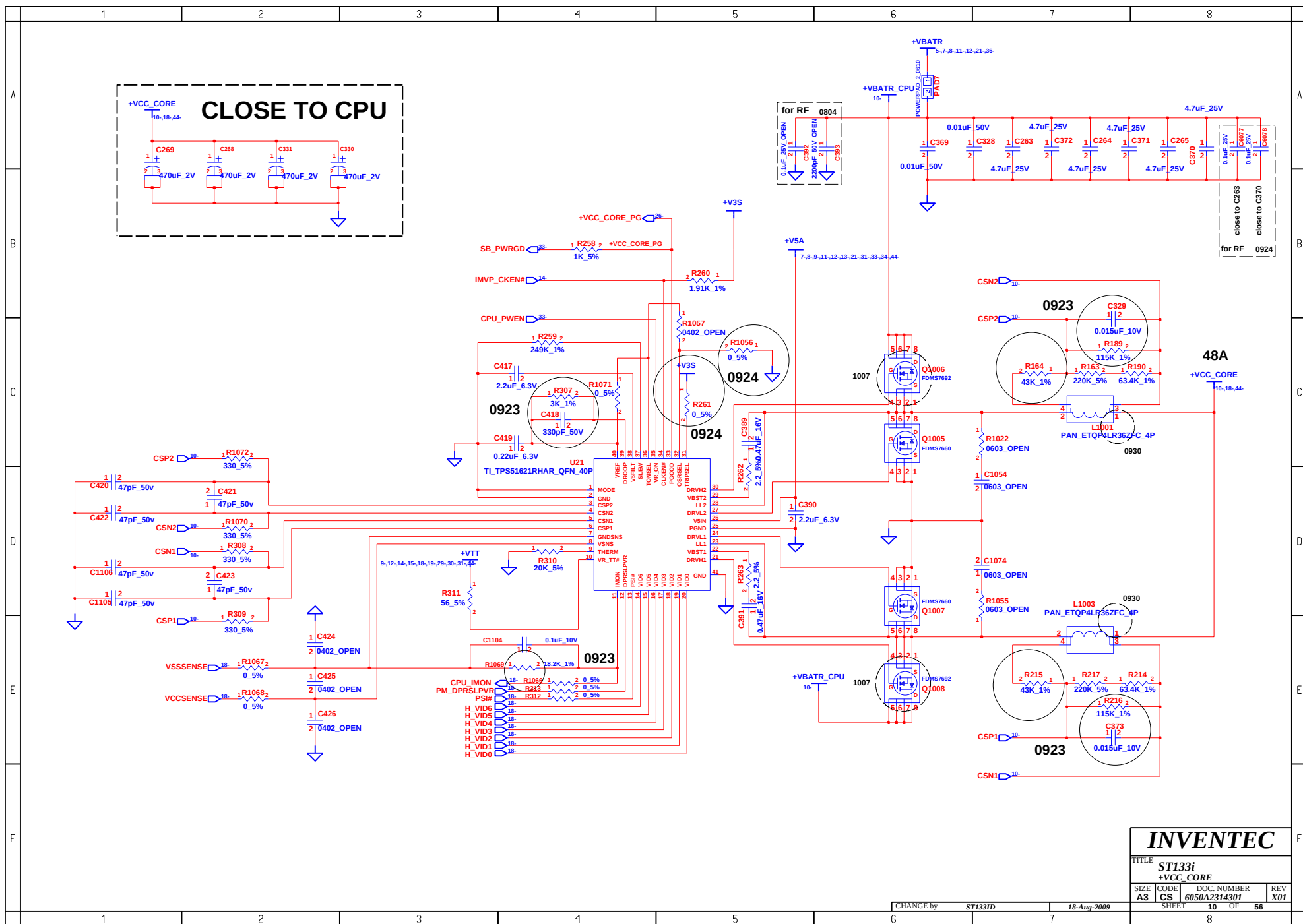
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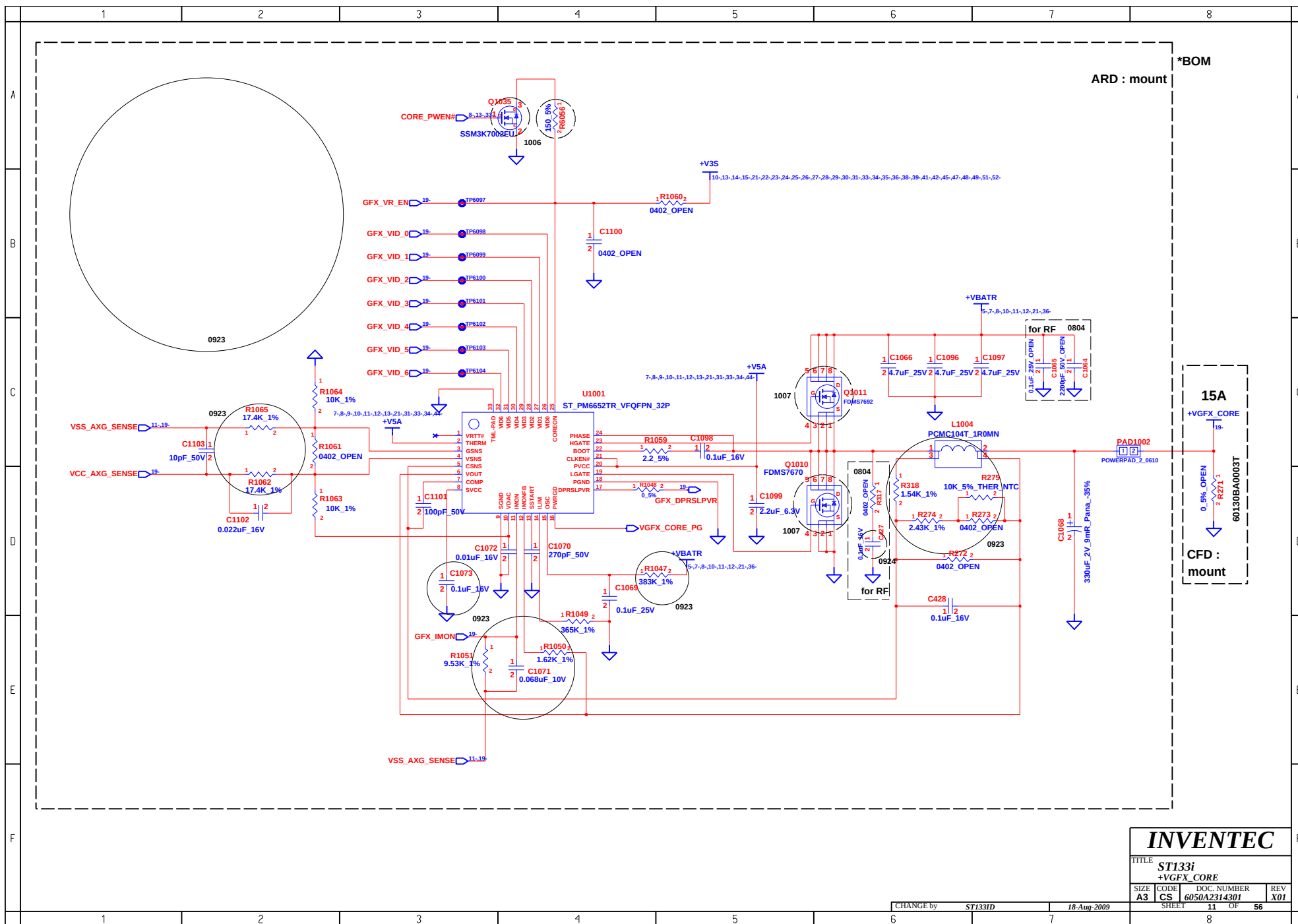
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ST133i			
+V1.5 & +V0.75			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01

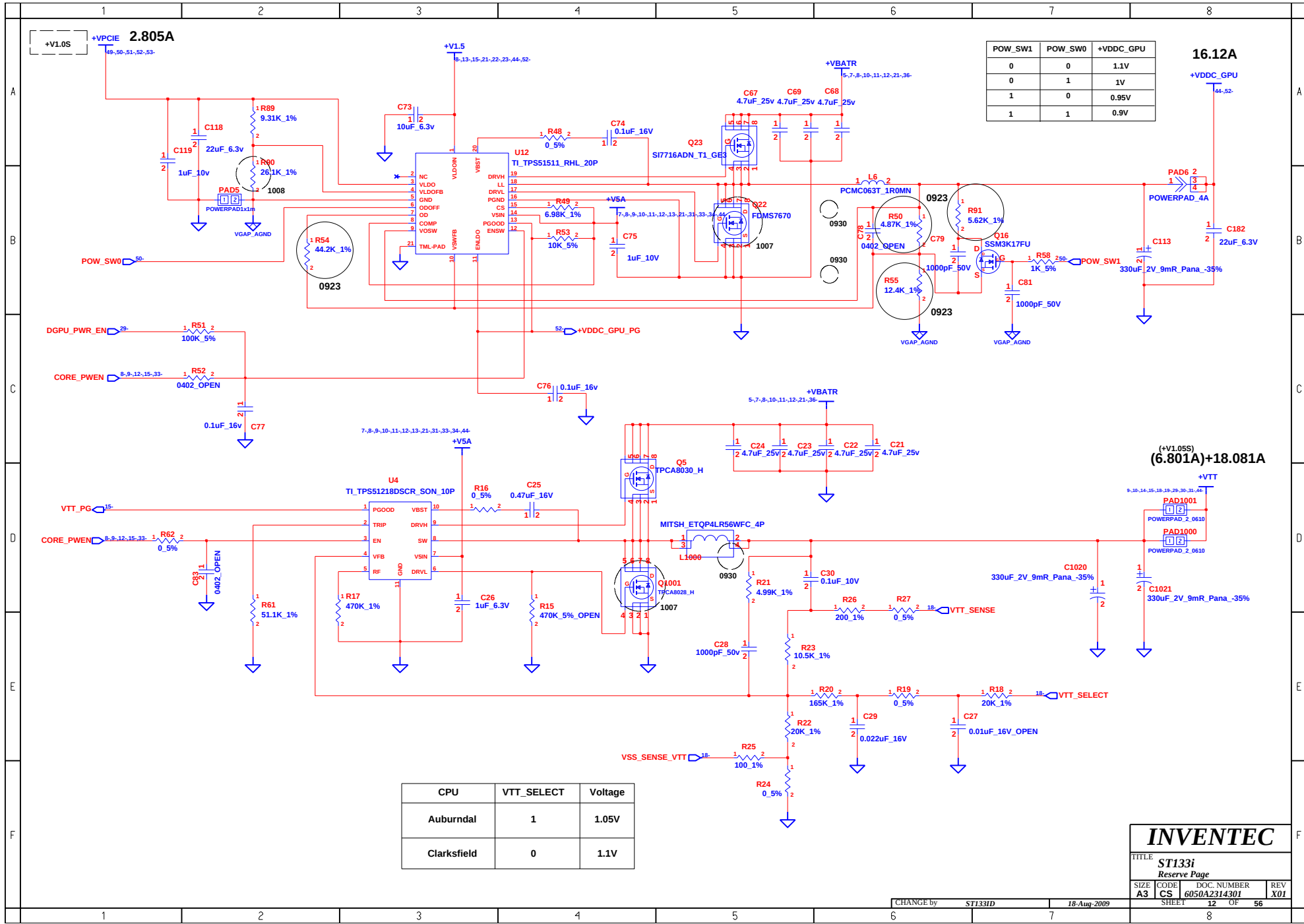
CHANGE by ST133ID 14-Sep-2009

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POW_SW1	POW_SW0	+VDDC_GPU
0	0	1.1V
0	1	1V
1	0	0.95V
1	1	0.9V

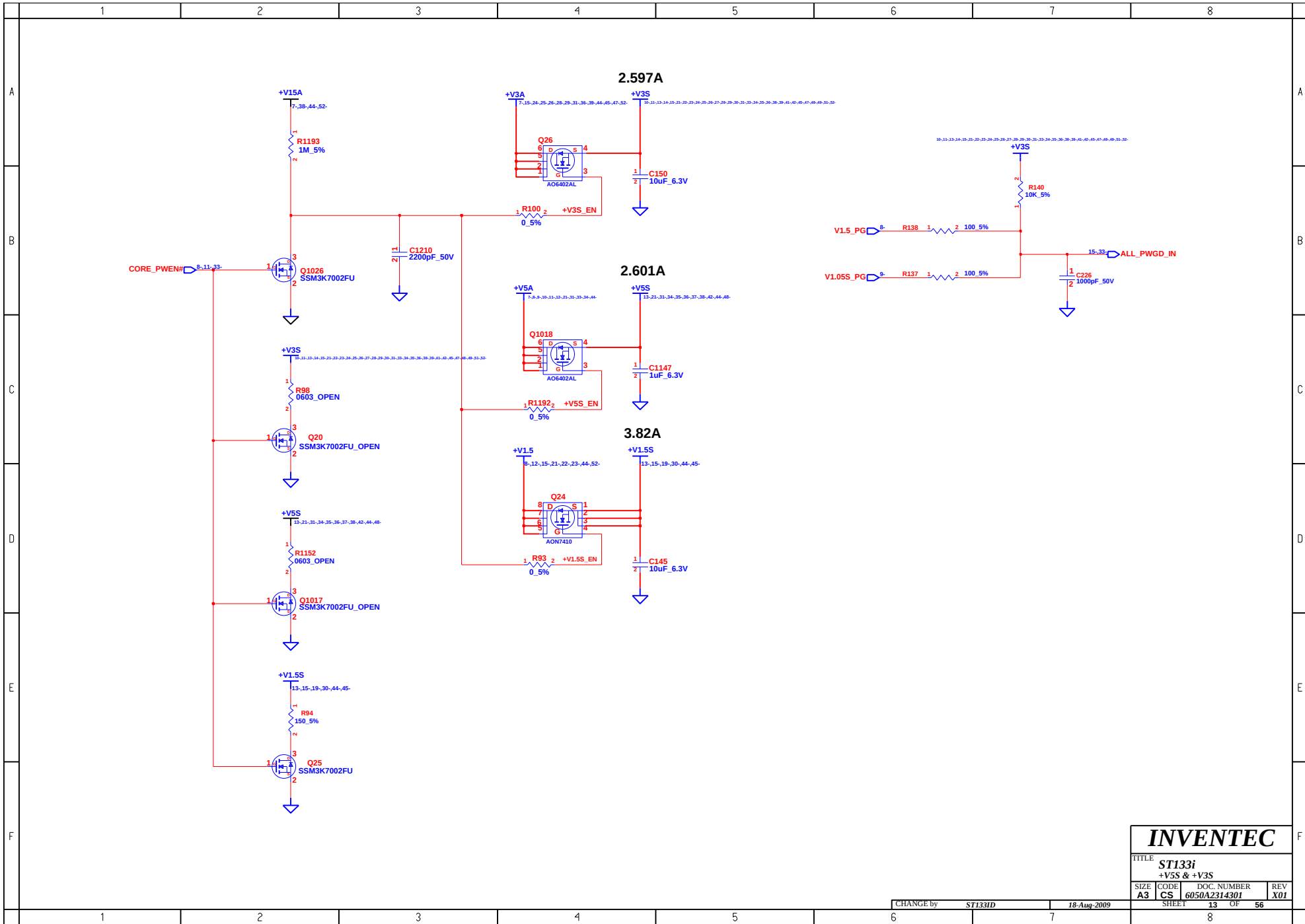
16.12A
+VDDC_GPU

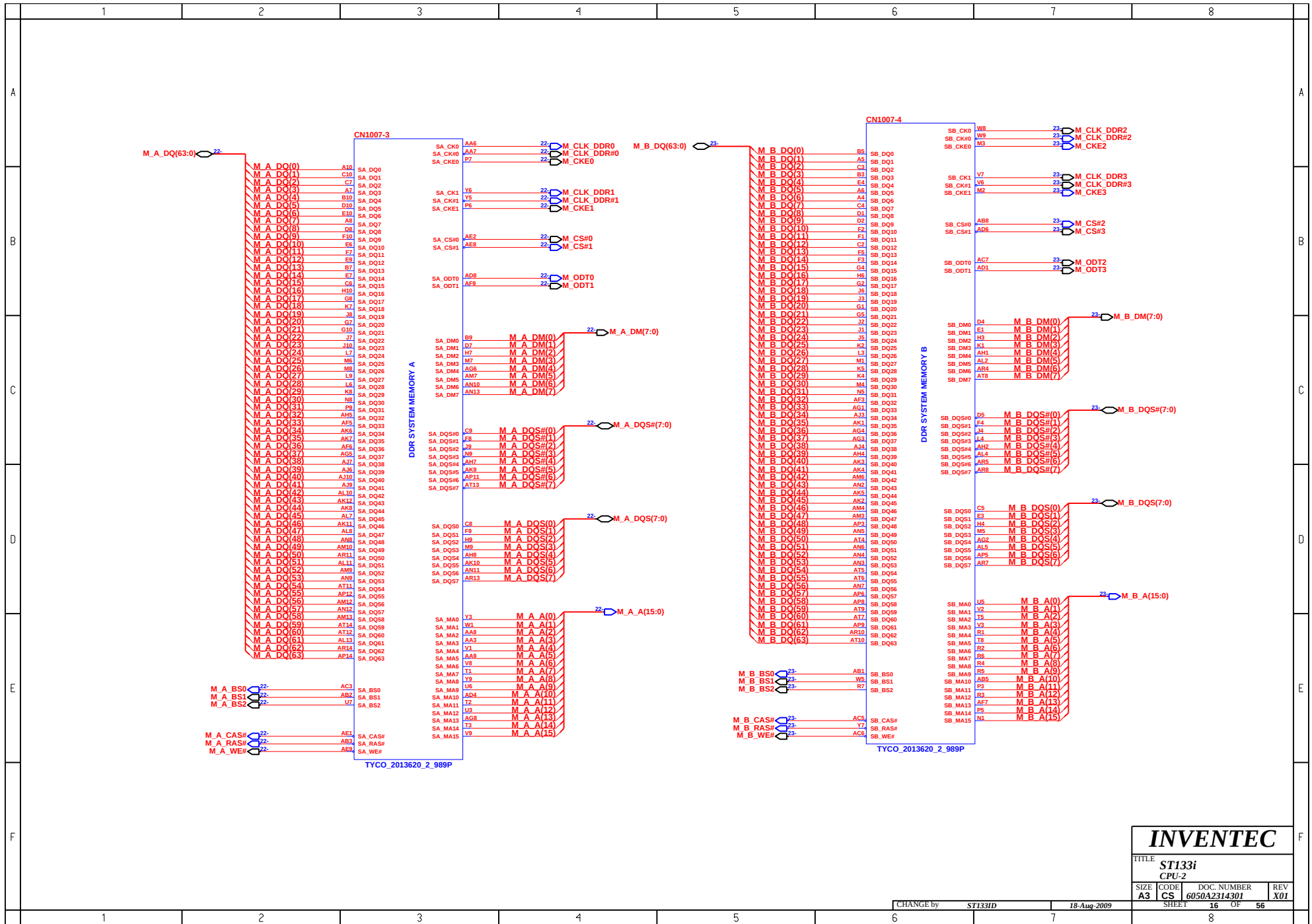
(+V1.05S)
(6.801A)+18.081A

CPU	VTT_SELECT	Voltage
Auburndal	1	1.05V
Clarksfield	0	1.1V

INVENTEC

TITLE ST133i Reserve Page			
SIZE A3	CODE CS	DOC. NUMBER 6050A2314301	REV X01
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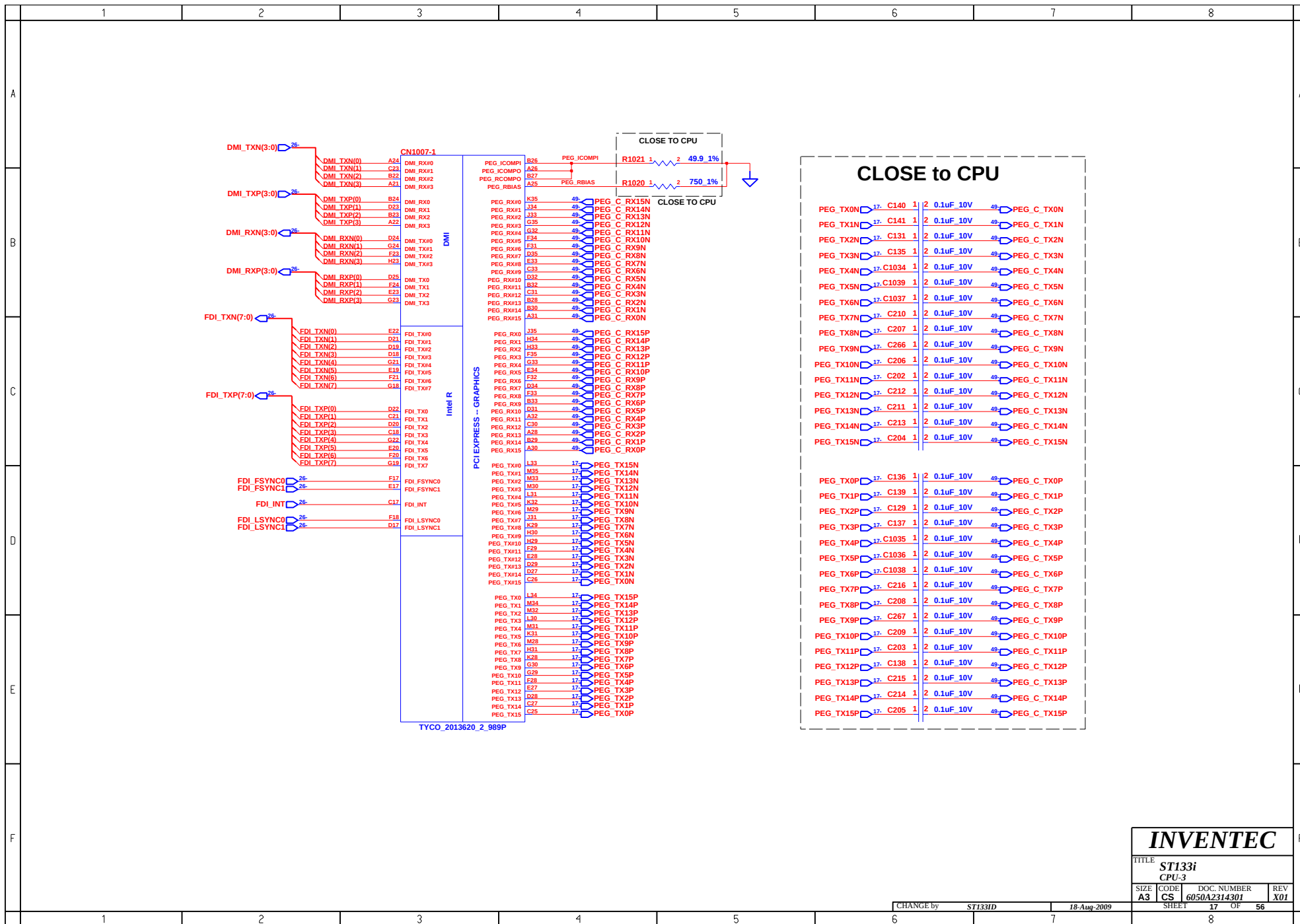




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TITLE			
ST133i			
CPU-2			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01
SHEET		16	OF 56

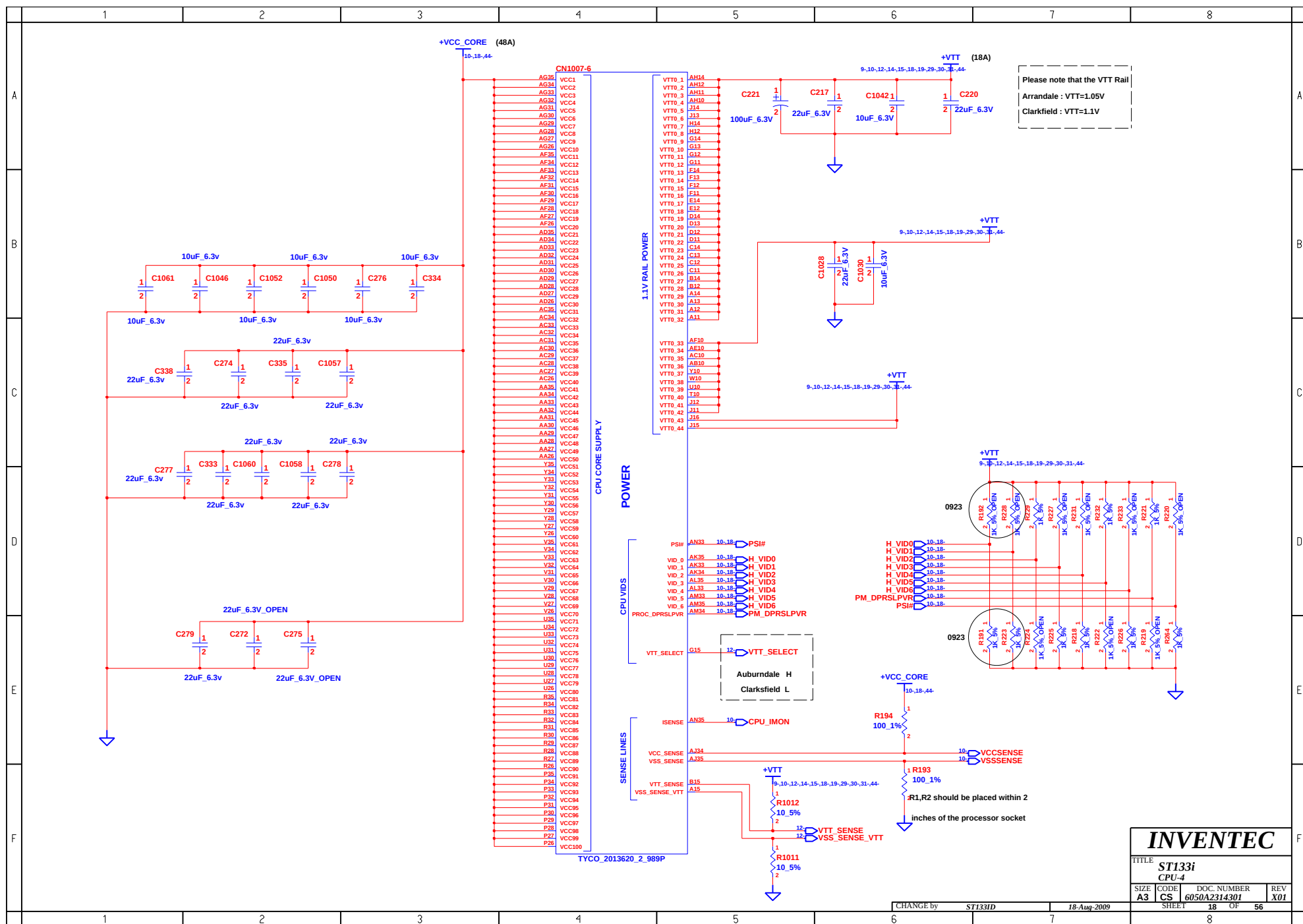
CHANGE by ST133ID 18-Aug-2009

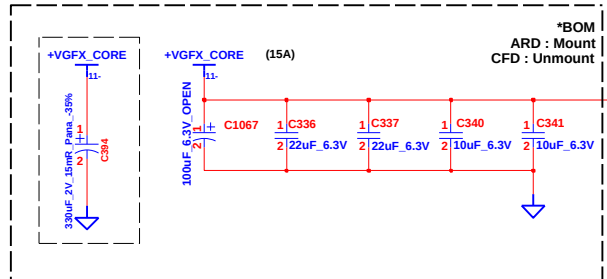


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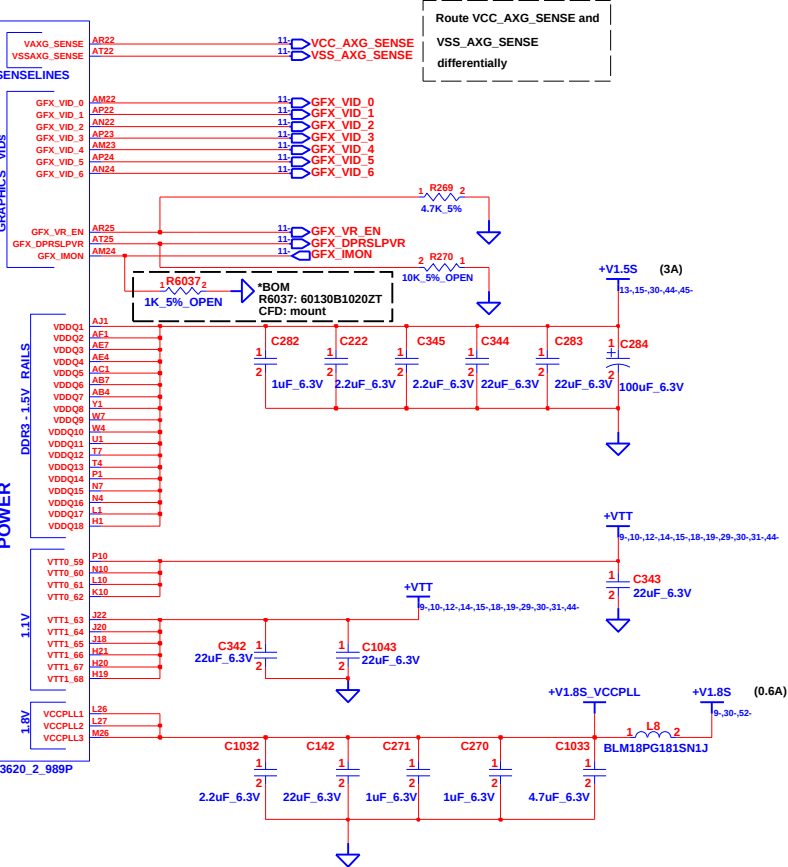
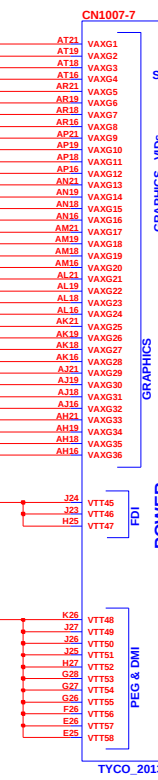
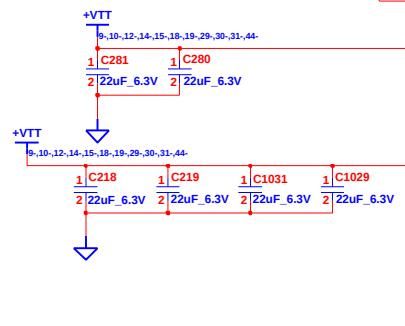
TITLE			
ST133i			
CPU-3			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01
SHEET		17	OF 56

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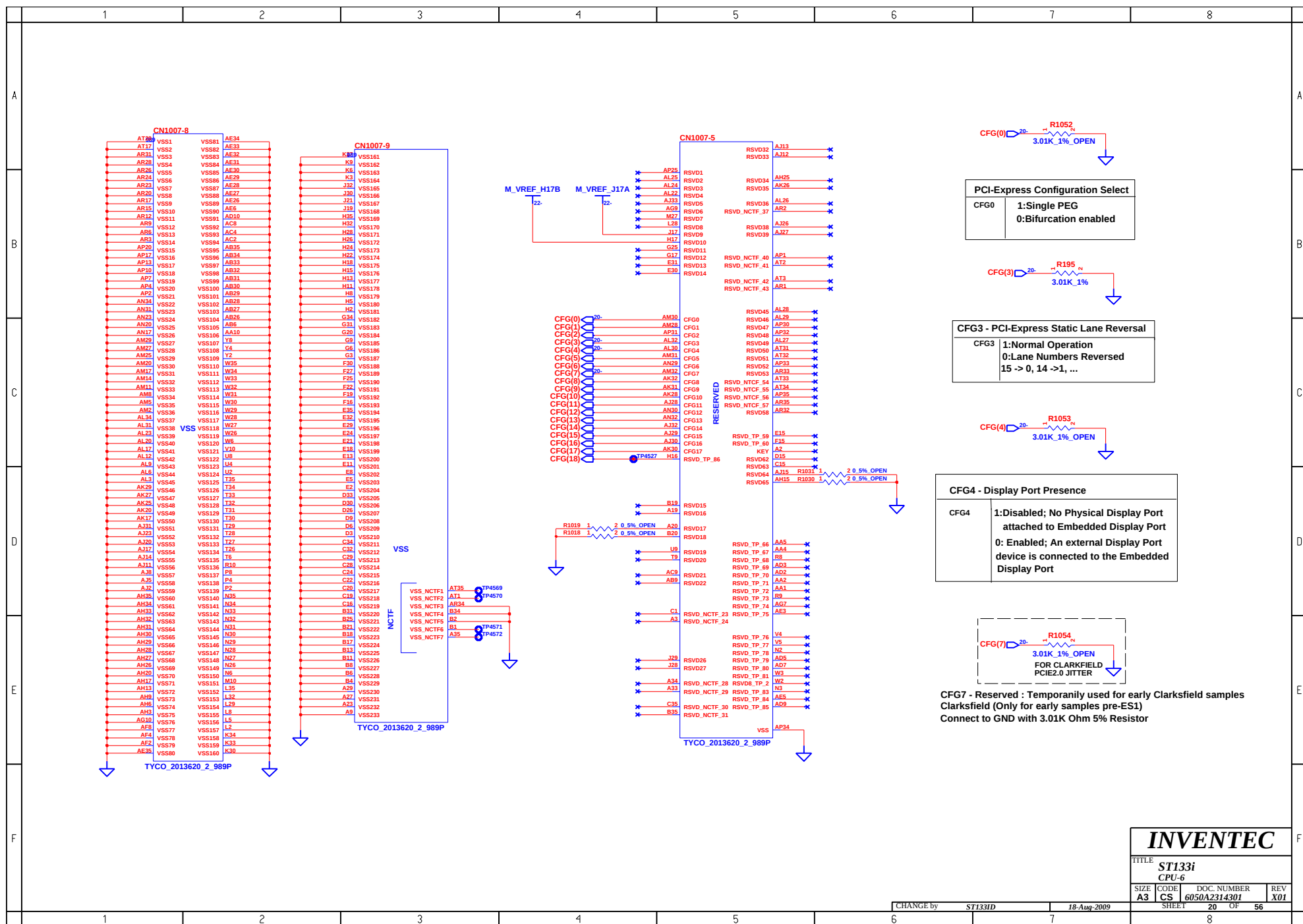
Please note that the VTT Rail Values are
Auburndale VTT=1.05V
Clarkfield VTT=1.1V

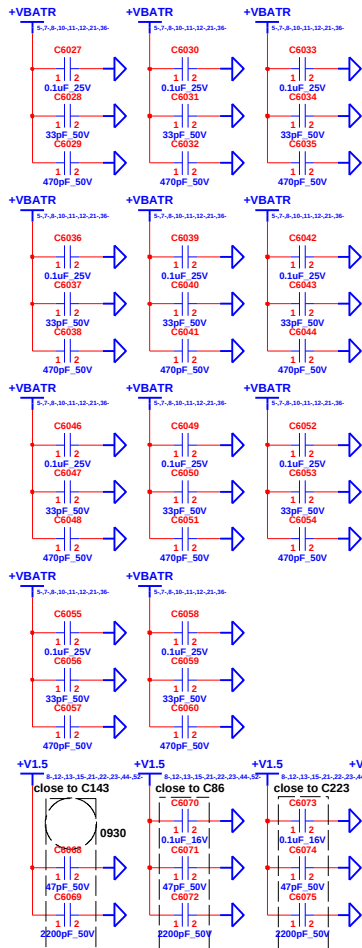
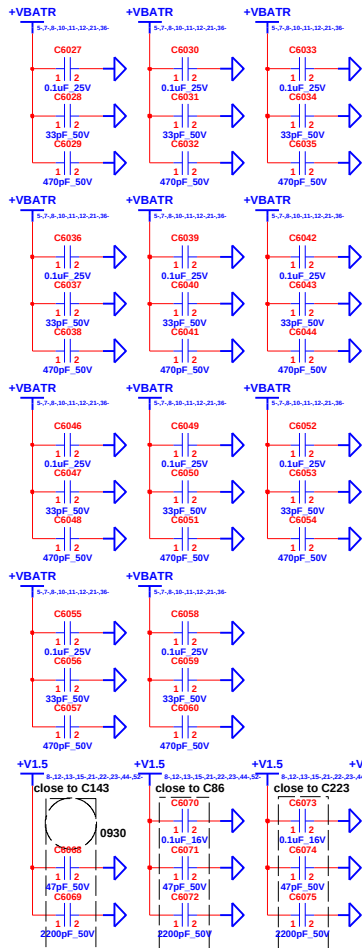
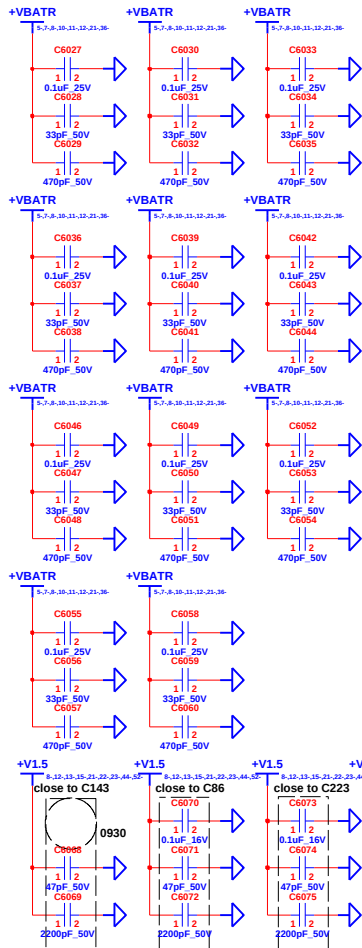


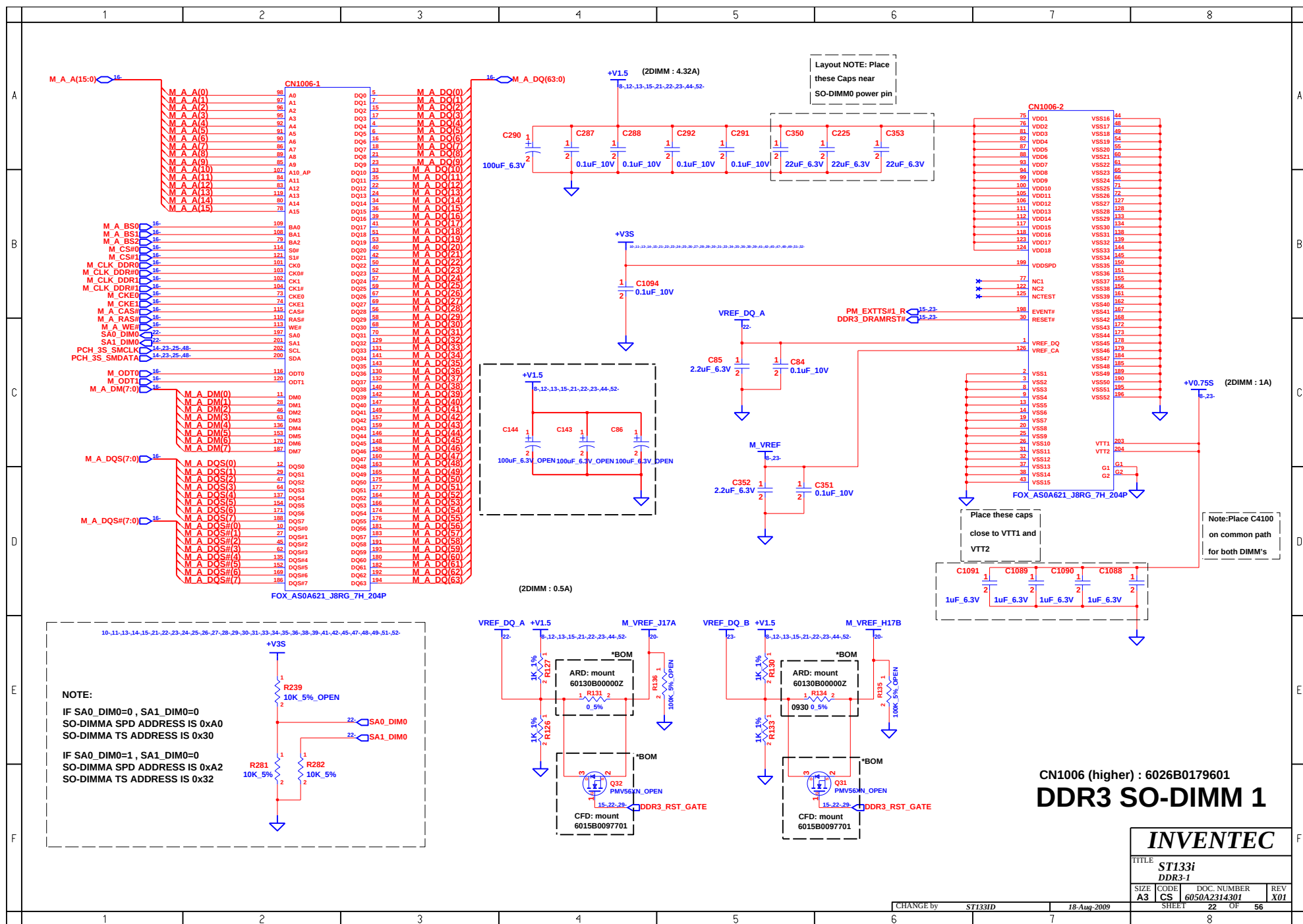
Route VCC_AXG_SENSE and
VSS_AXG_SENSE
differentially

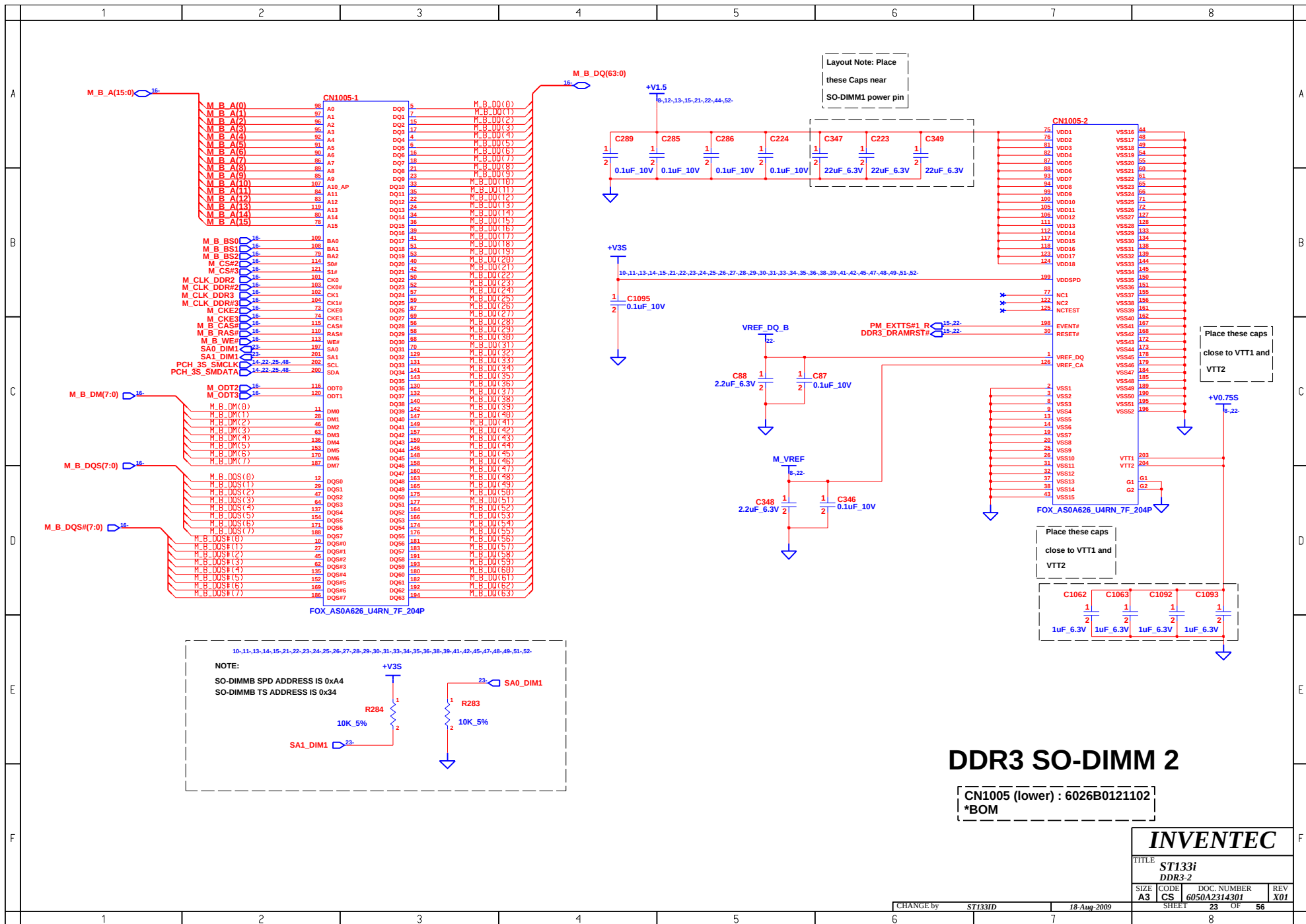
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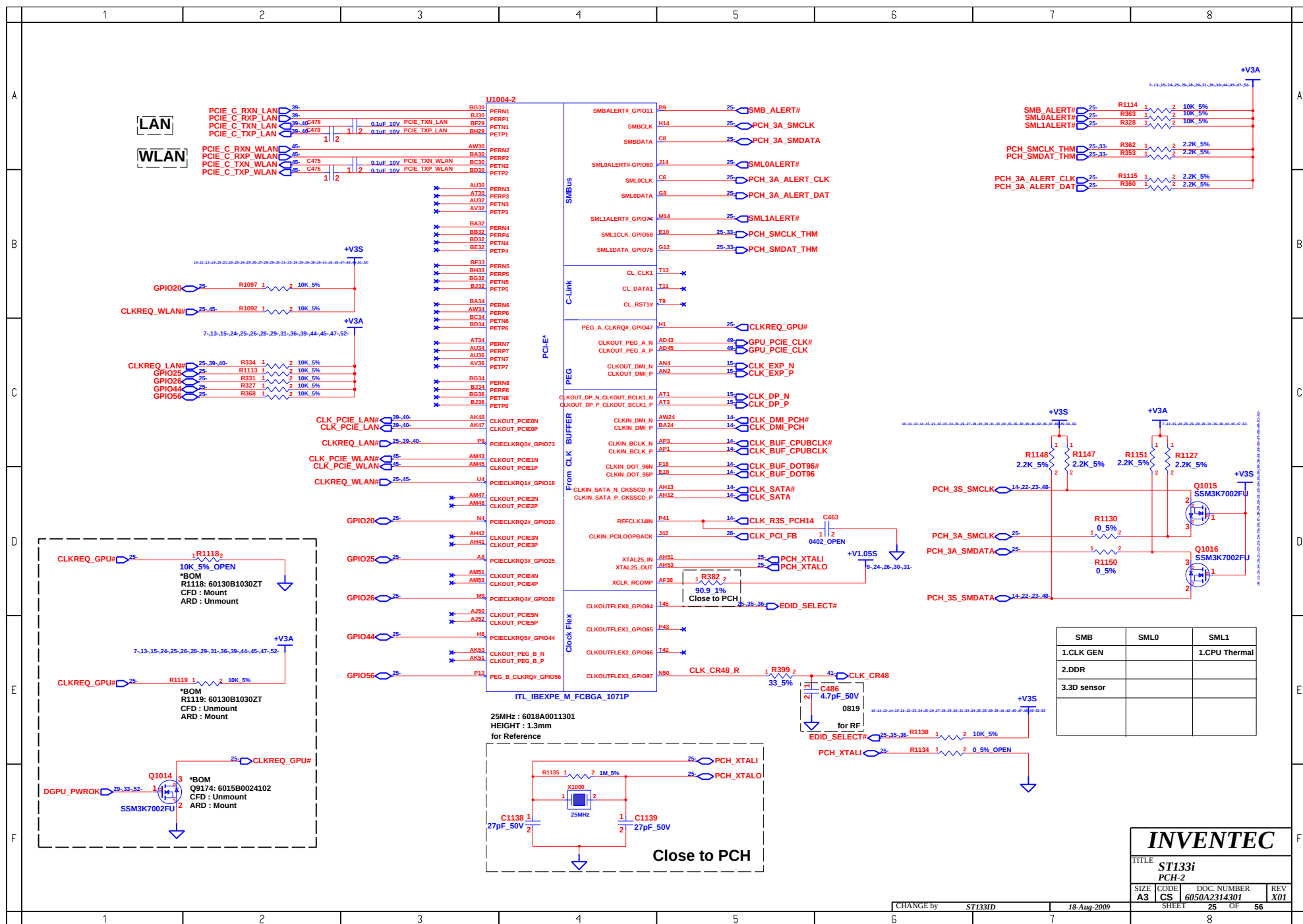
TITLE			
ST133i			
CPU-5			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01
SHEET		19	OF 56

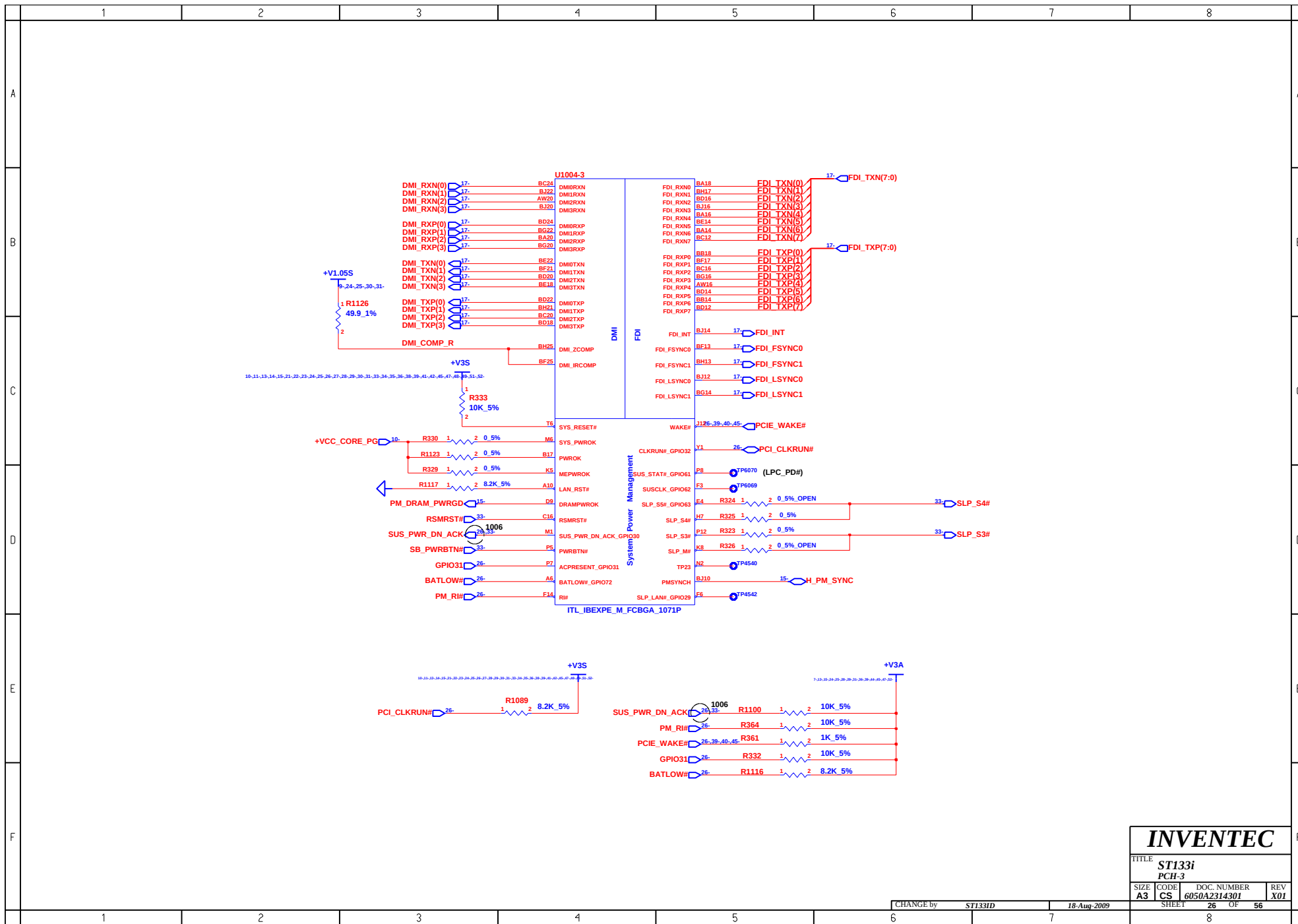










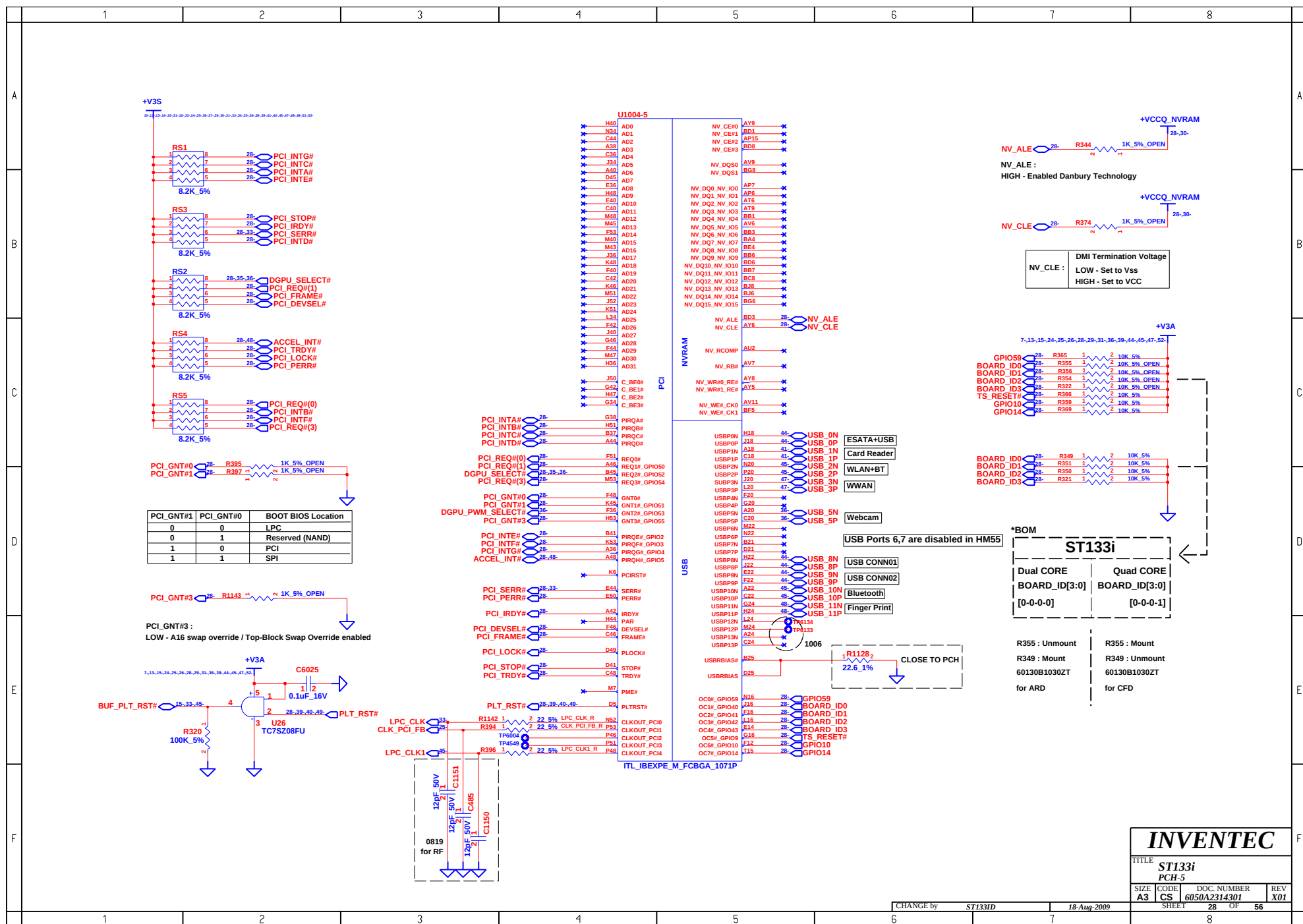


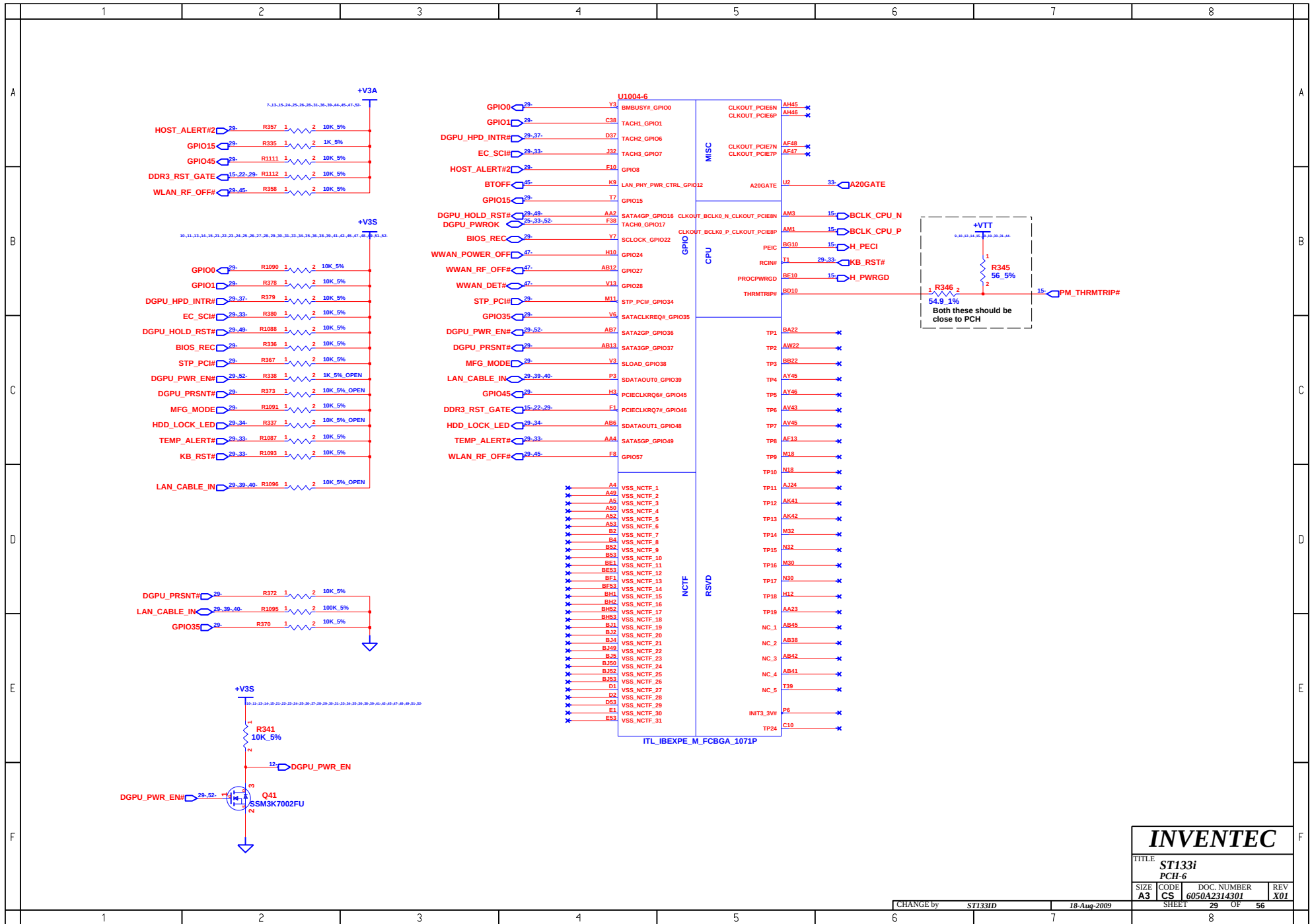
INVENTEC

TITLE			
ST133i			
PCH-3			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01

CHANGE by ST133ID 18-Aug-2009

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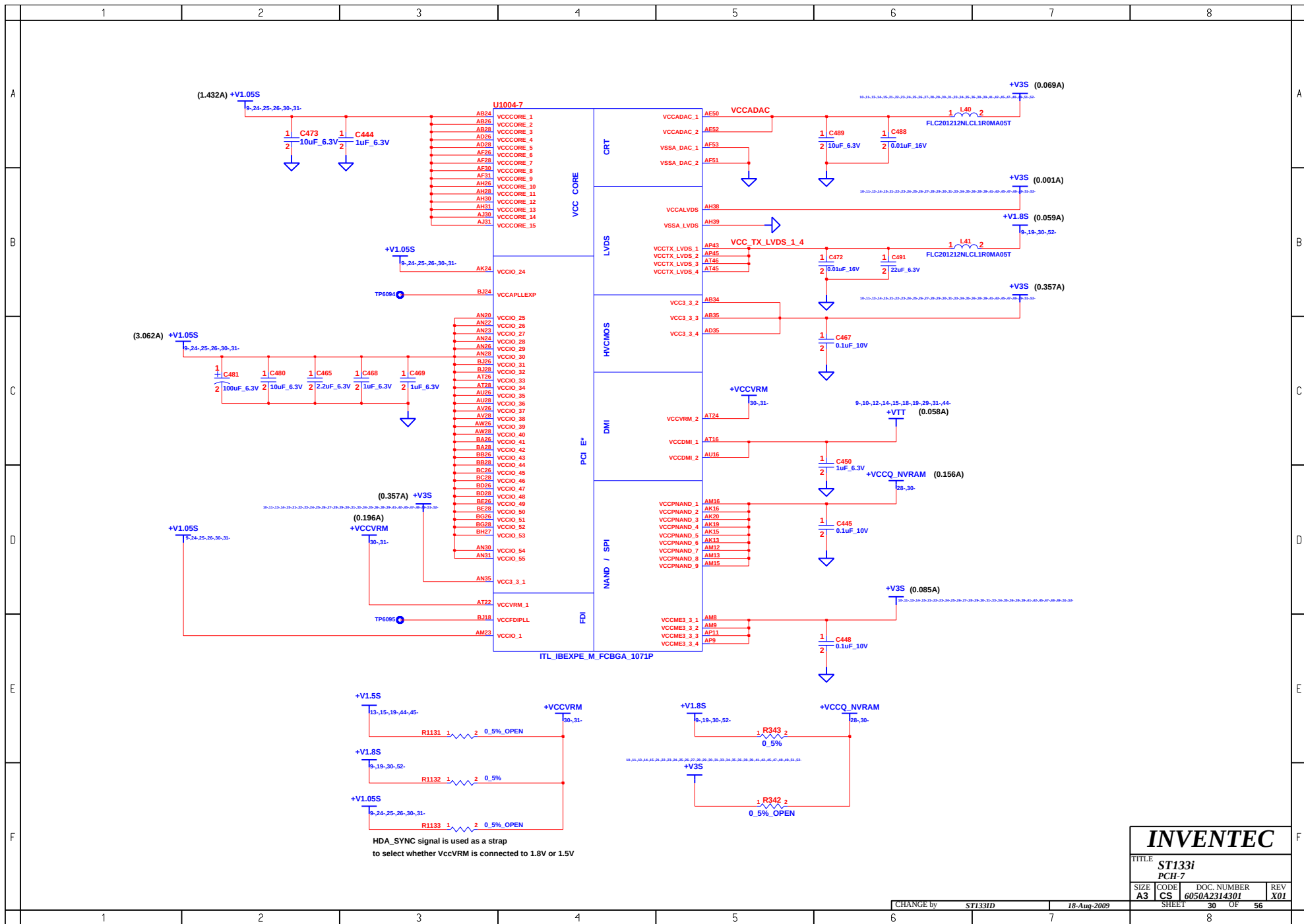
INVENTEC

TITLE
ST133i
PCH-6

SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01

CHANGE by ST133ID 18-Aug-2009

SHEET 29 OF 56

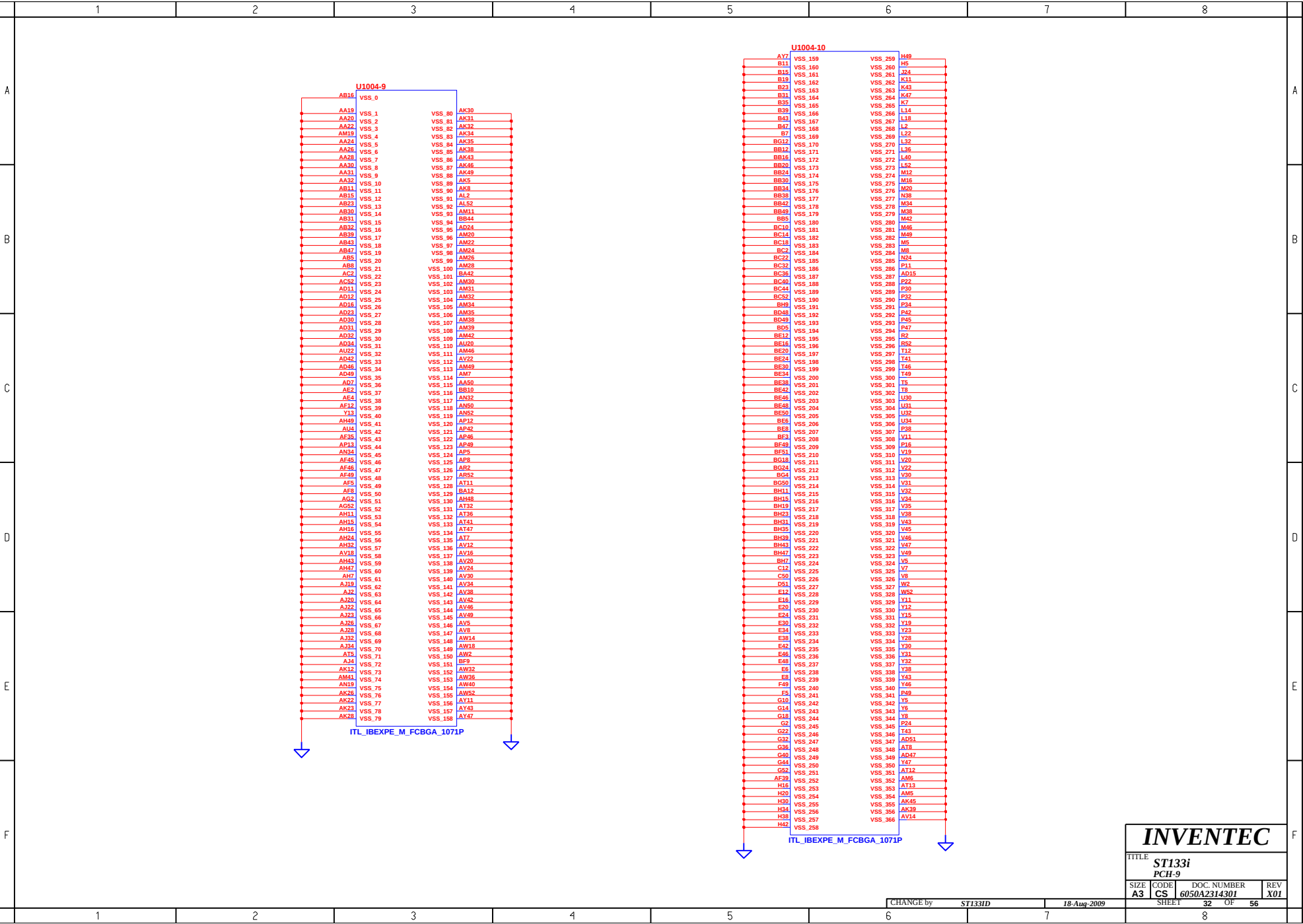


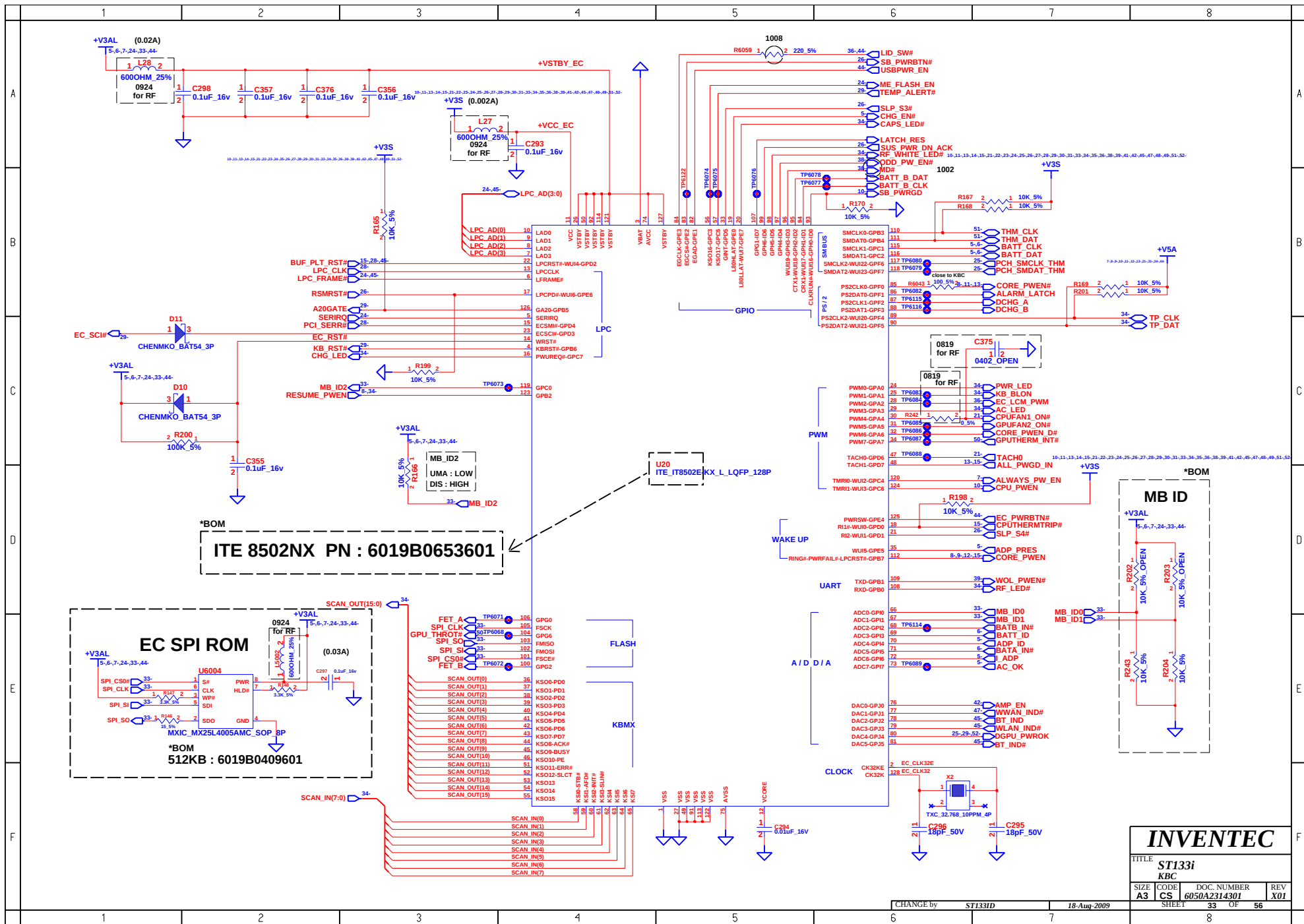
HDA_SYNC signal is used as a strap
to select whether VccVRM is connected to 1.8V or 1.5V

INVENTEC

TITLE ST133i PCH-7			
SIZE A3	CODE CS	DOC. NUMBER 6050A2314301	REV X01
SHEET 30		OF 56	

CHANGE by ST133ID 18-Aug-2009

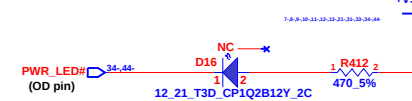
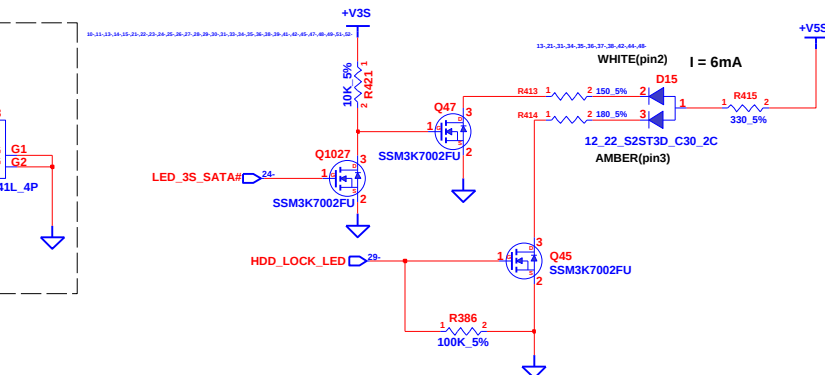
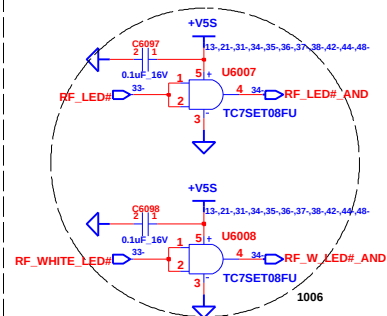
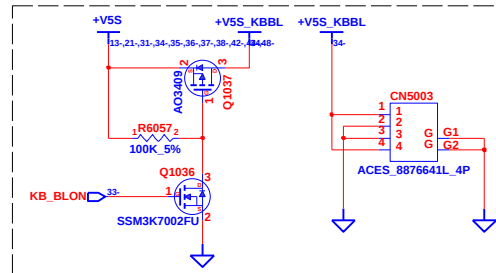
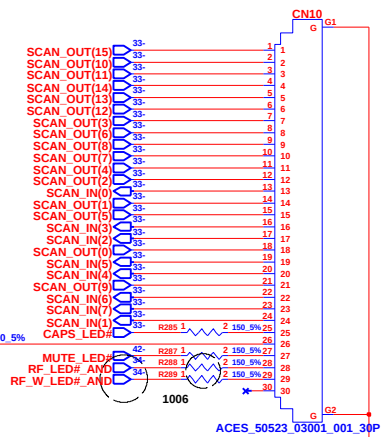
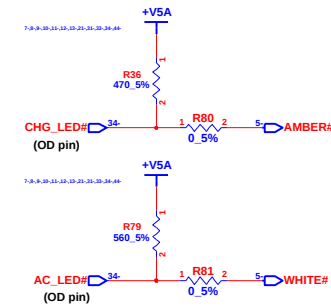
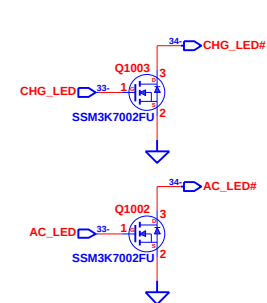
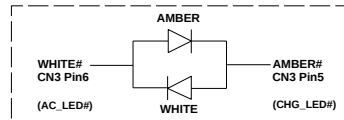
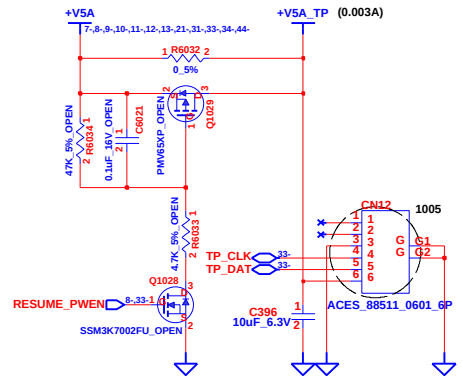




CHANGE by ST133ID

18-Aug-2009

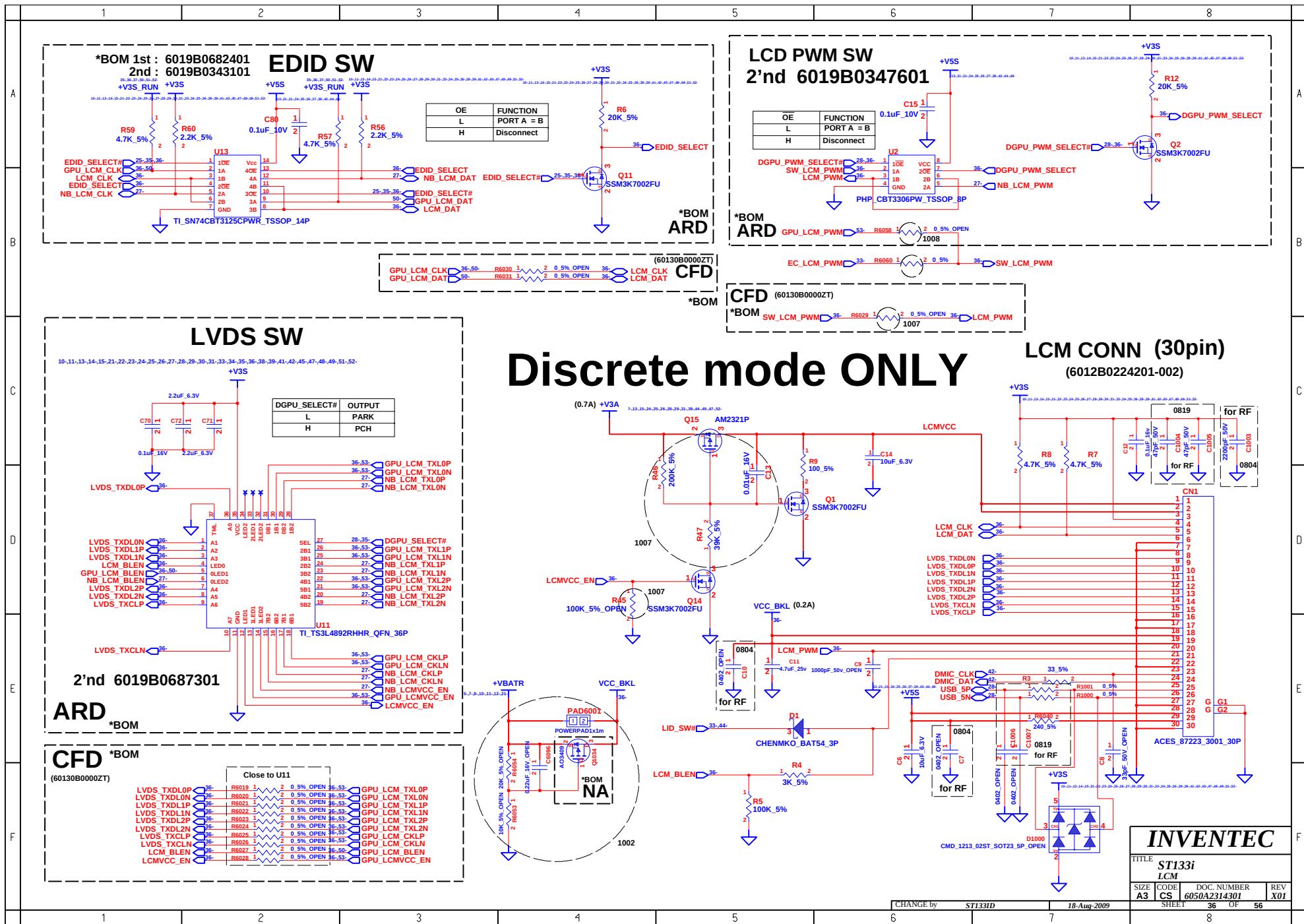
8

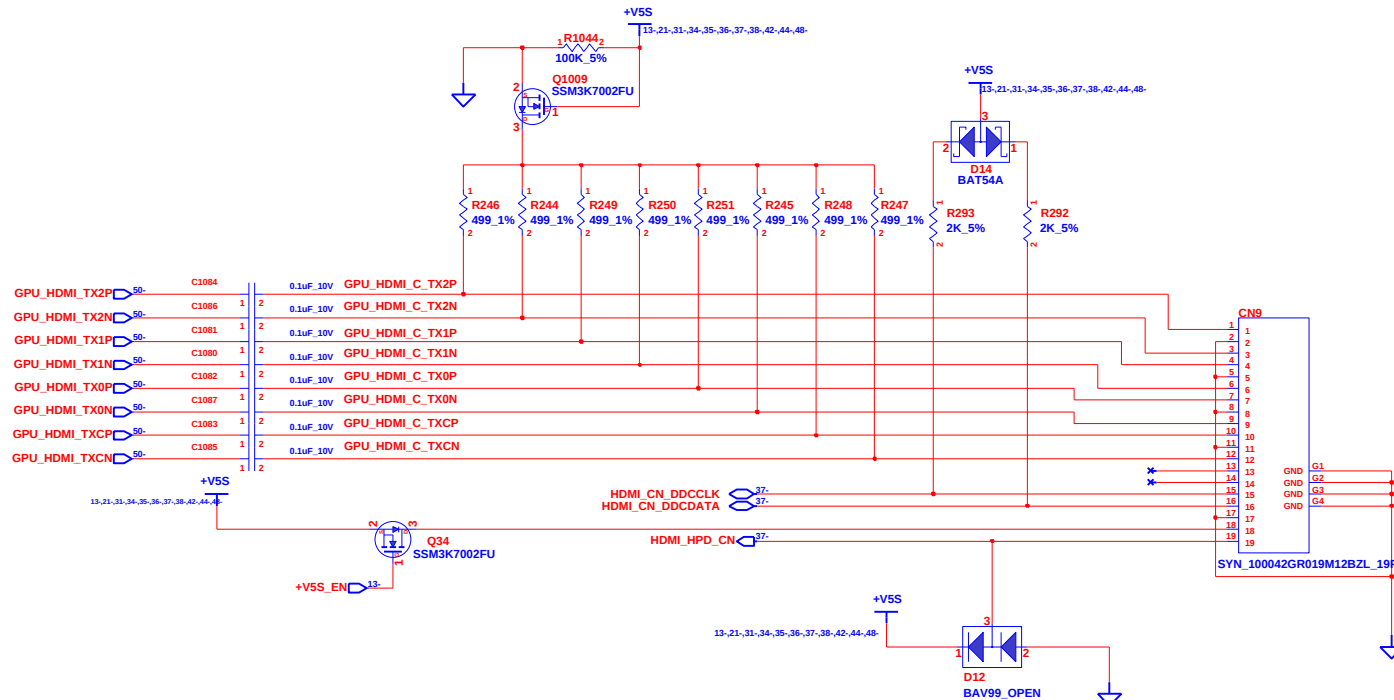


DGPU_SELECT#	S1	S2
L	ON	OFF
H	OFF	ON



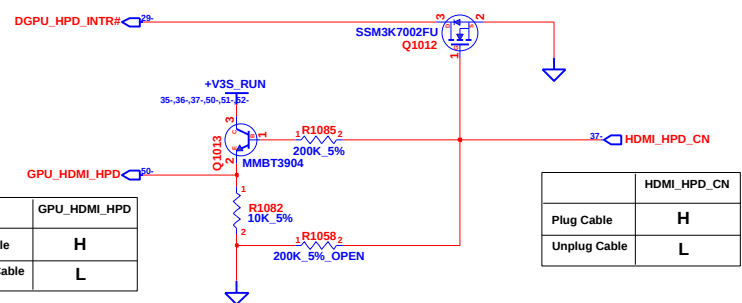
TITLE			
<i>ST133i</i> <i>CRT</i>			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01
SHEET		35	OF 56





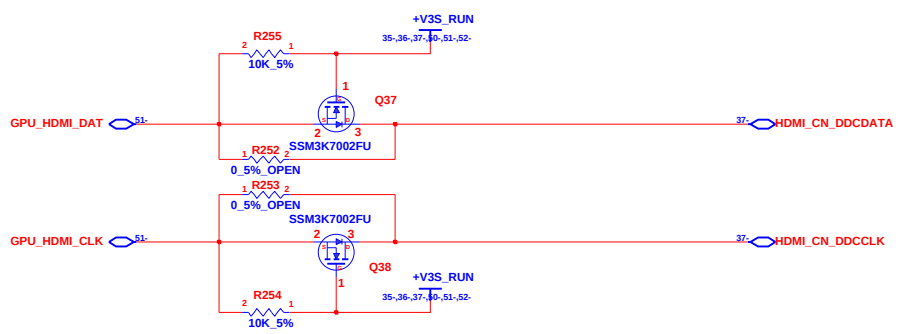
HDMI CONN

	DGPU_HPD_INTR#
Plug Cable	L
Unplug Cable	H



	GPU_HDMI_HPD
Plug Cable	H
Unplug Cable	L

	HDMI_HPD_CN
Plug Cable	H
Unplug Cable	L



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TITLE			
ST133i			
HDMI Level-Shift			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01
SHEET		OF	
37		56	

CHANGE by ST133ID 18-Aug-2009

A



A



D

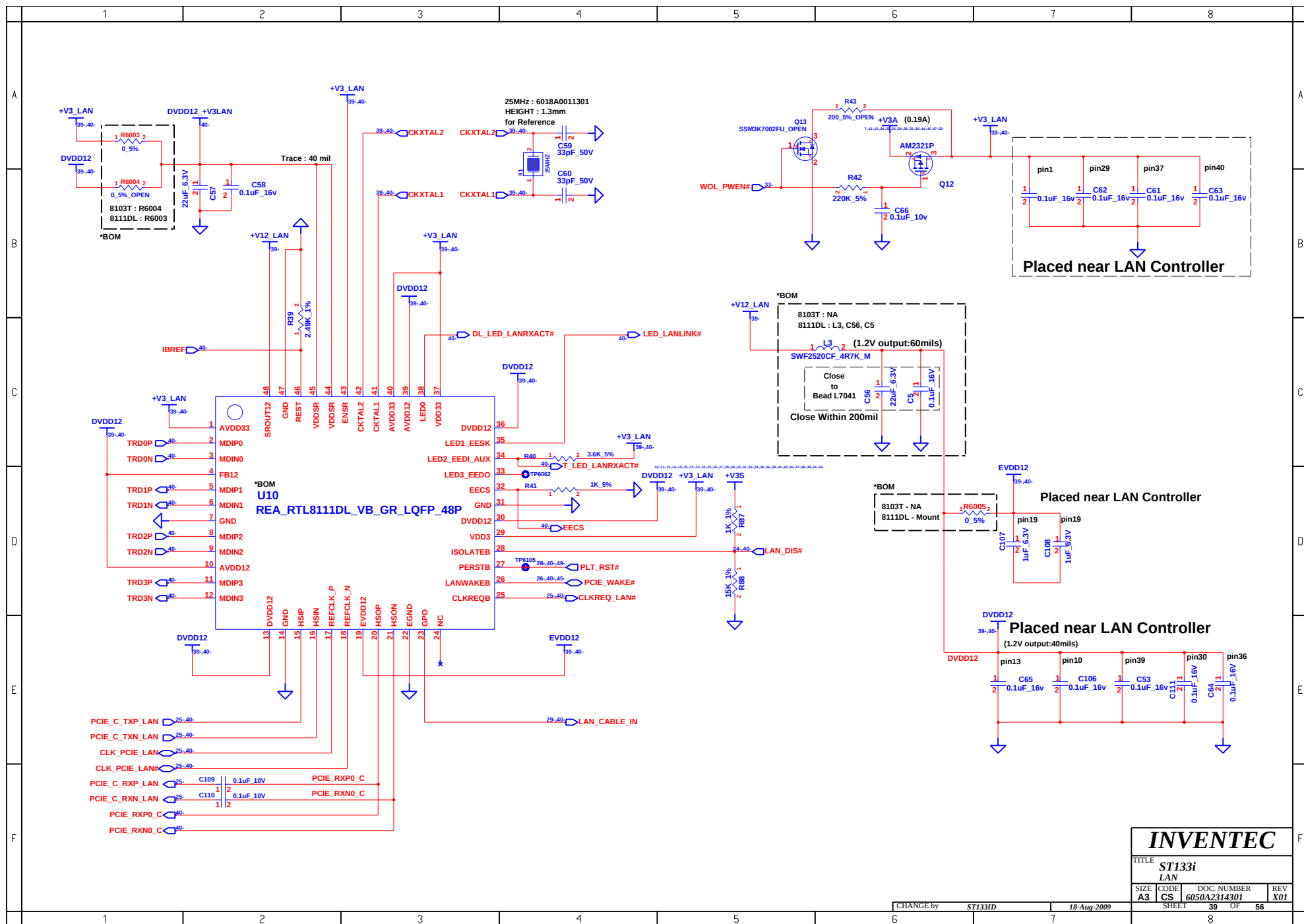


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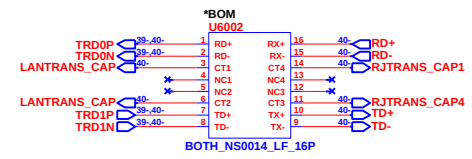
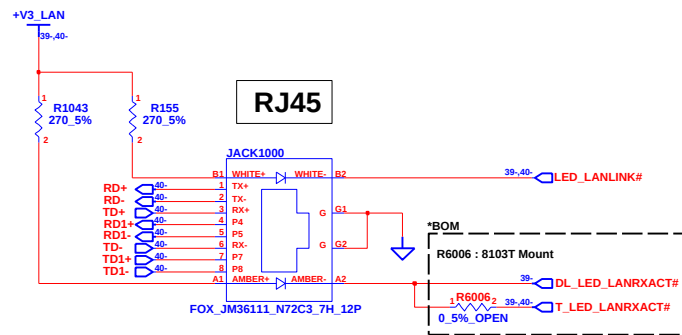
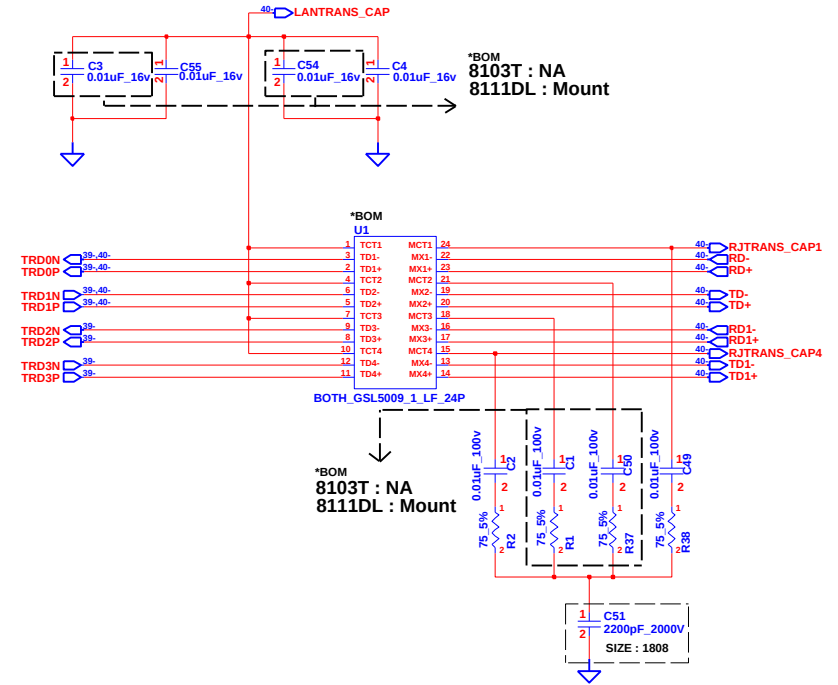
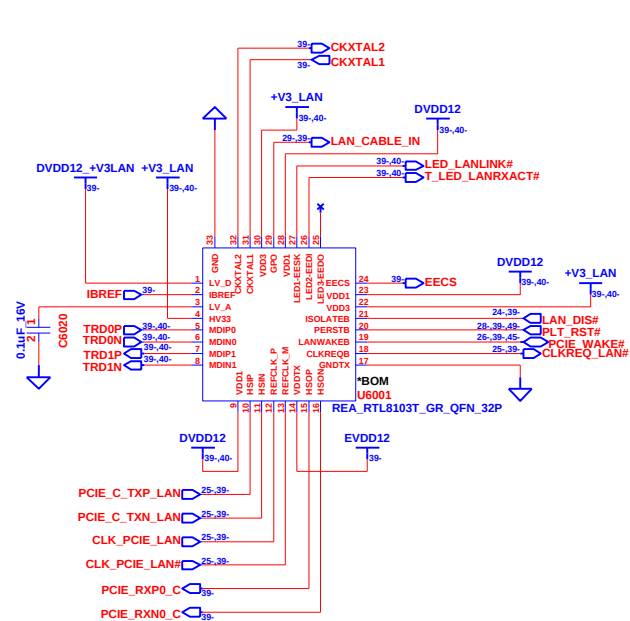


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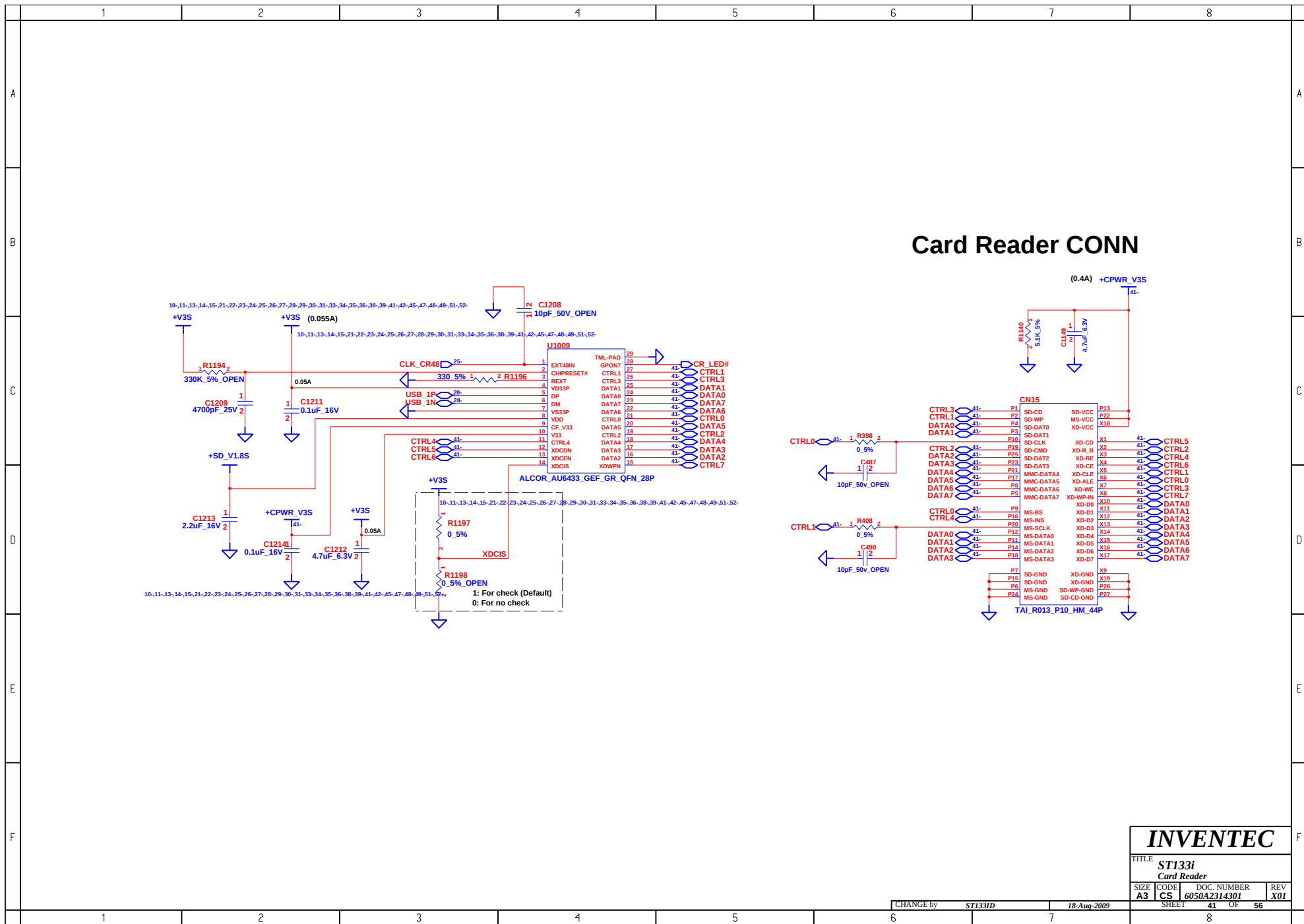
CHANGE by	ST133ID	18-Aug-2009
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LAYOUT NOTE : Place termination resistors and caps as close to LAN controller as possible



INVENTEC			
TITLE			
ST133i			
RJ-45			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01
CHANGE by		ST133ID	26-Aug-2009
SHEET		40	OF 56

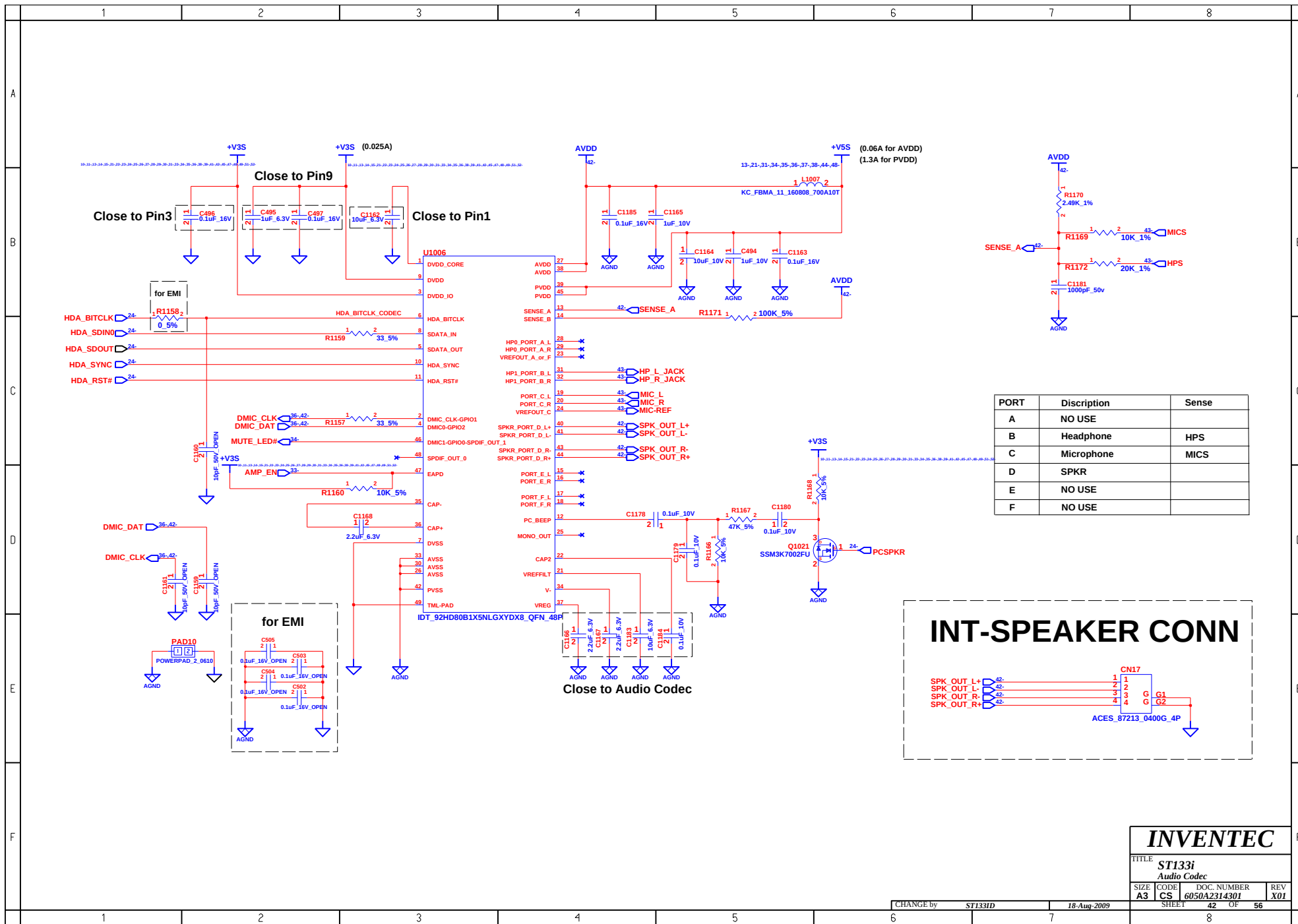


Card Reader CONN

INVENTEC

TITLE			
ST133i			
Card Reader			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01
SHEET		41	OF 56

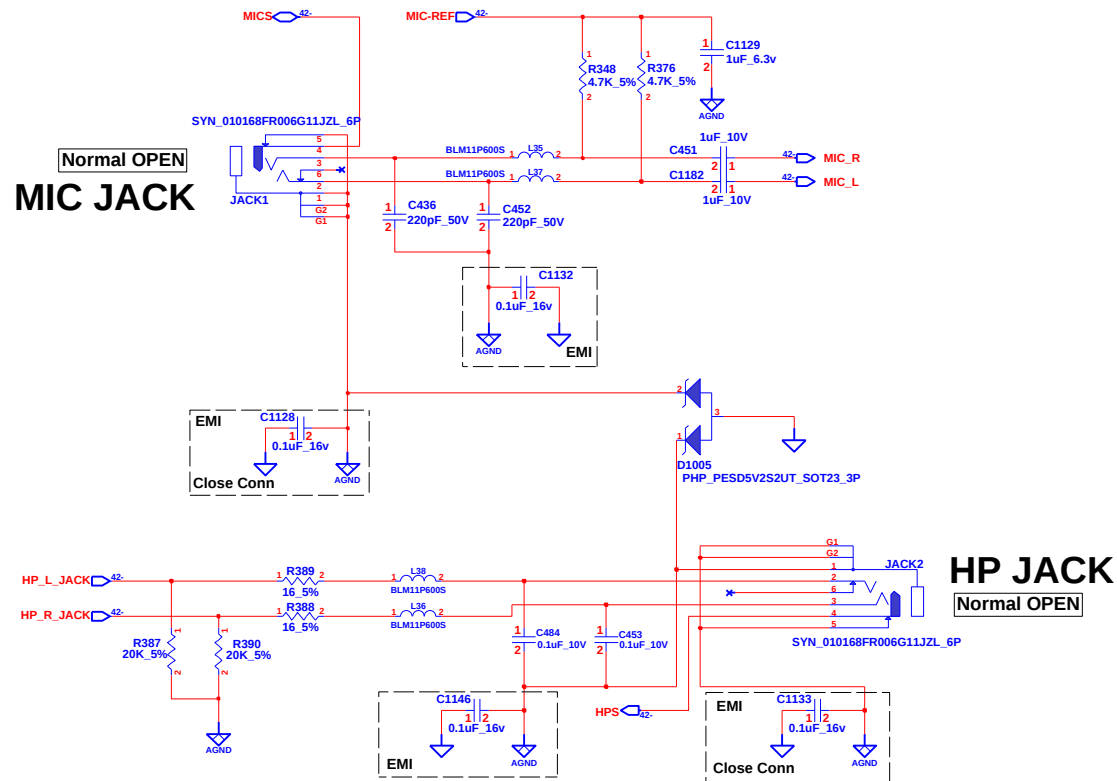
CHANGE by ST133ID 18-Aug-2009



INVENTEC

TITLE			
ST133i			
Audio Codec			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01
SHEET		42	OF 56

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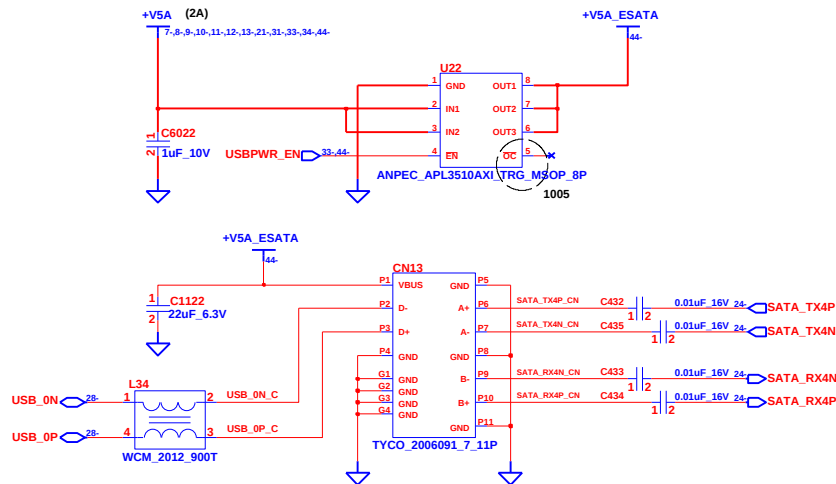
INVENTEC

TITLE			
ST133i			
HP JACK & MIC JACK			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01

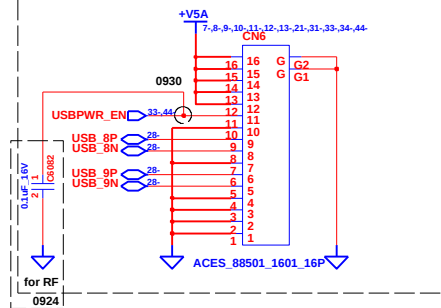
CHANGE by ST133ID 18-Aug-2009

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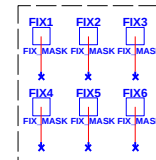
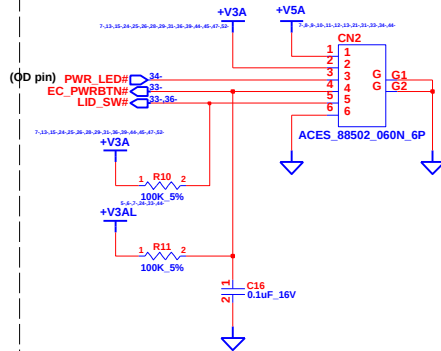
ESATA CONN (without Re-Driver chip)



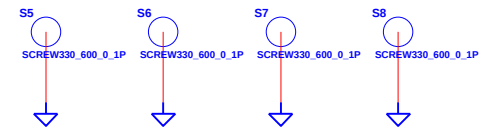
USB BOARD Cable on MB



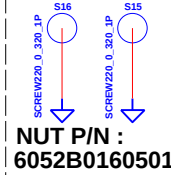
PBN Cable CN on MB



CPU's screws



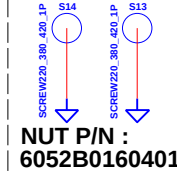
for PCH



NUT P/N :
6052B0160501

*BOM

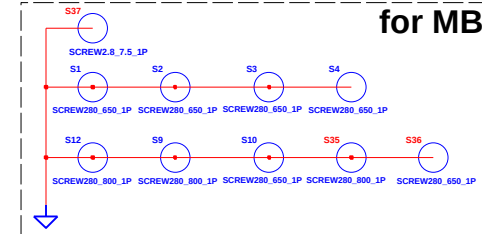
for VGA



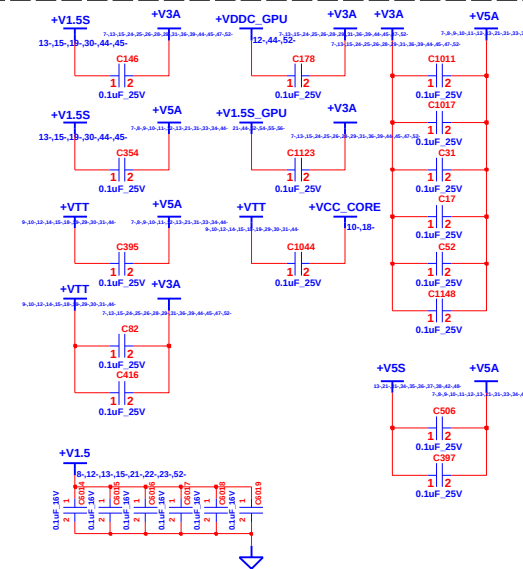
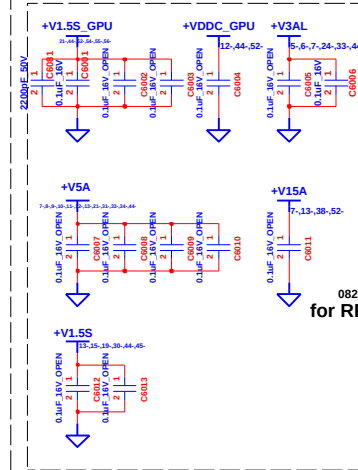
NUT P/N :
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*BOM

for MB



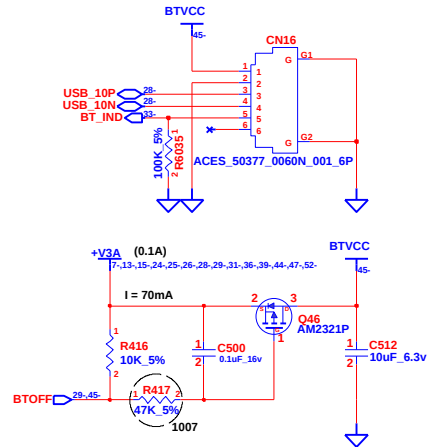
EMI CAPS



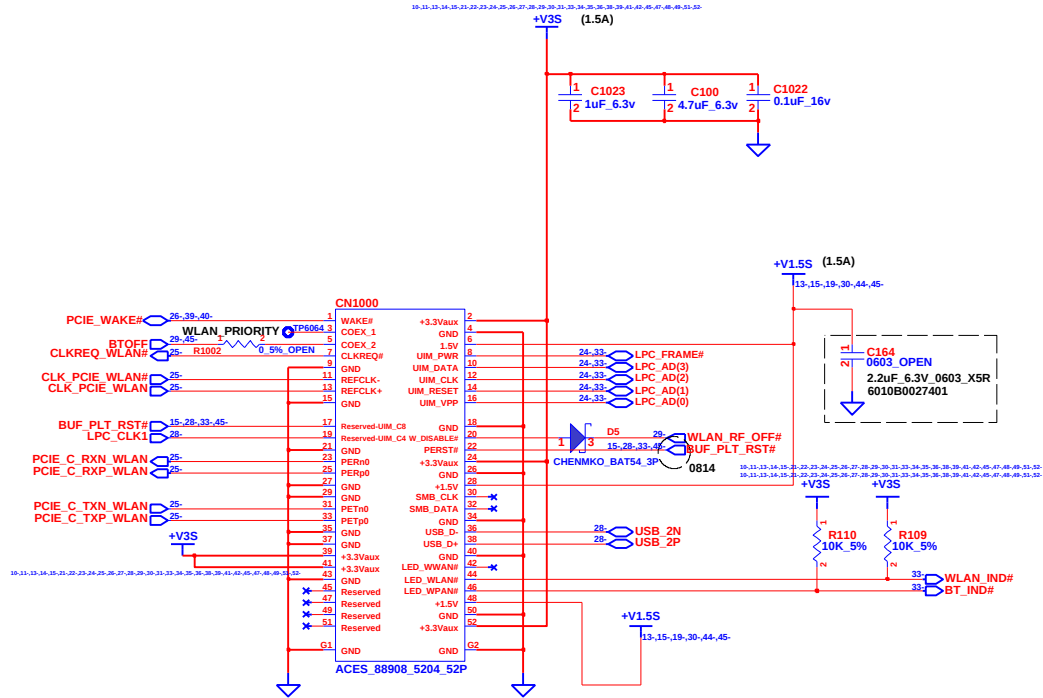
INVENTEC

TITLE ST133i ESATA, SCREW & LID			
SIZE A3	CODE CS	DOC. NUMBER 6050A2314301	REV X01
CHANGE by ST133ID		18-Aug-2009	
SHEET 44		OF 56	

BLUETOOTH CONN



WLAN CONN (MINICARD)



***BOM**
CN1000 : 6026B0184301

INVENTEC

TITLE			
ST133i			
WLAN, BT & WebCAM			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01
SHEET		45	OF 56

CHANGE by ST133ID 18-Aug-2009

A



C



F



A |



C |

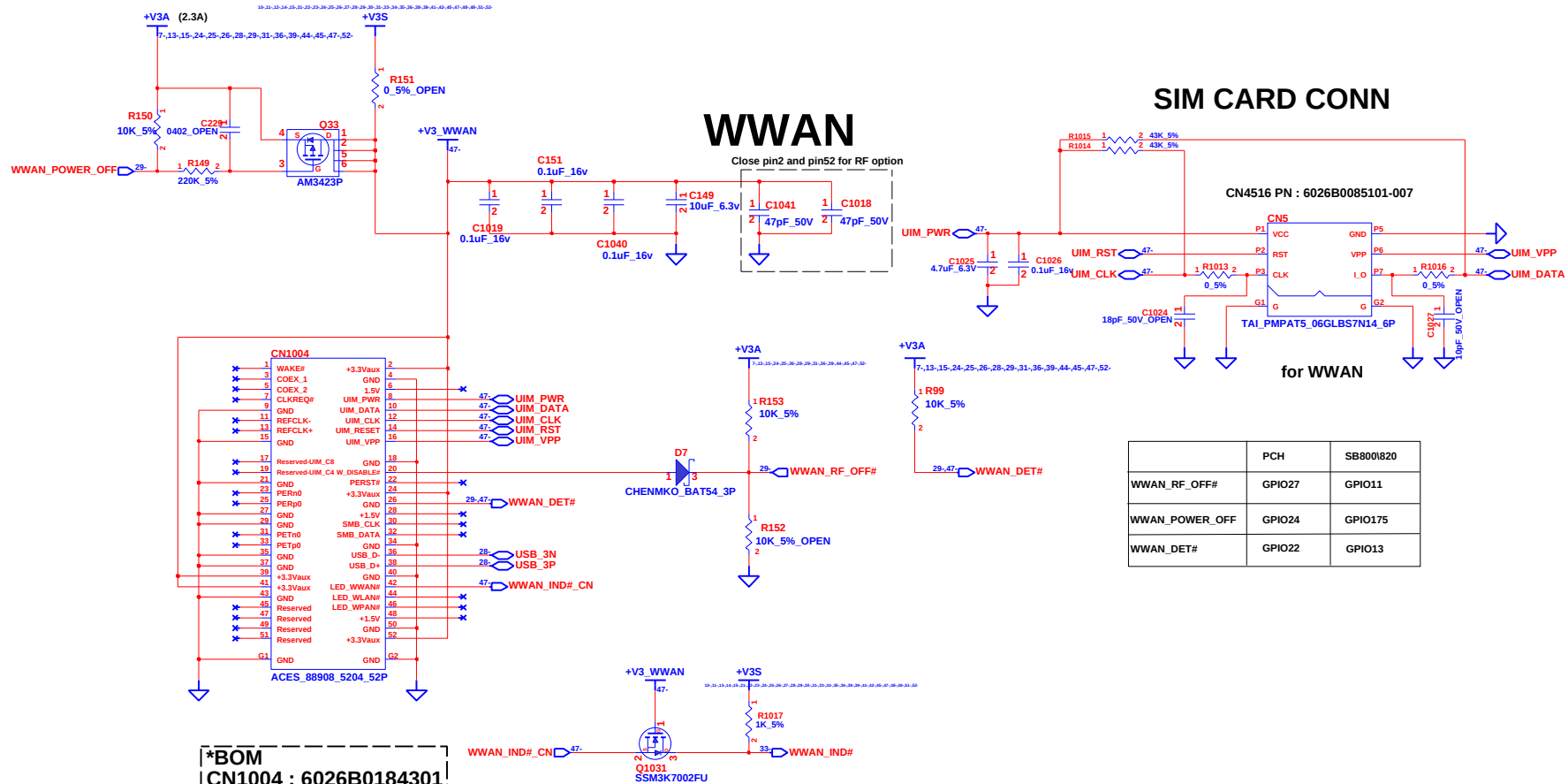


F

3

CHANGE by	ST133ID	18-Aug-2009
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OPTION PART



***BOM**
CN1004 : 6026B0184301

SIM CARD CONN

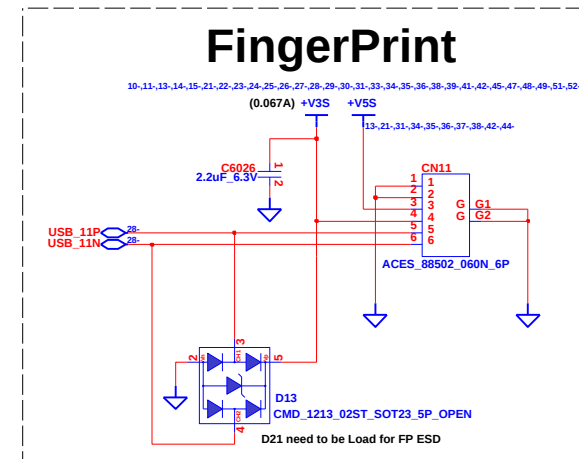
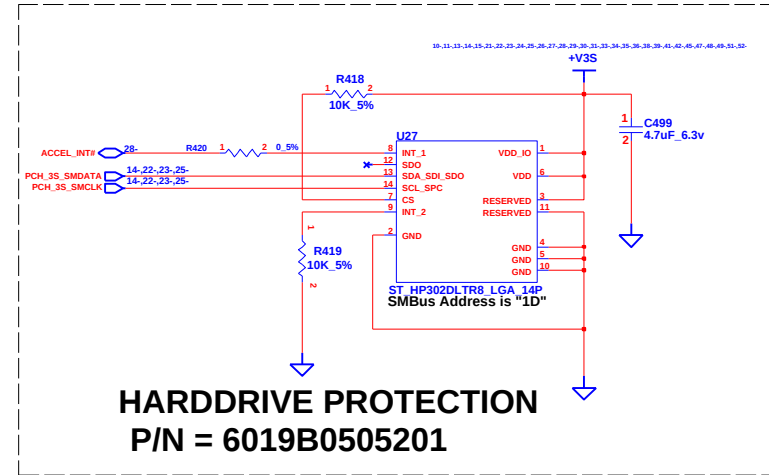
	PCH	SB800I820
WWAN_RF_OFF#	GPIO27	GPIO11
WWAN_POWER_OFF	GPIO24	GPIO175
WWAN_DET#	GPIO22	GPIO13

INVENTEC

TITLE ST133i WWAN(Optional)			
SIZE A3	CODE CS	DOC. NUMBER 6050A2314301	REV X01
SHEET 47		OF 56	

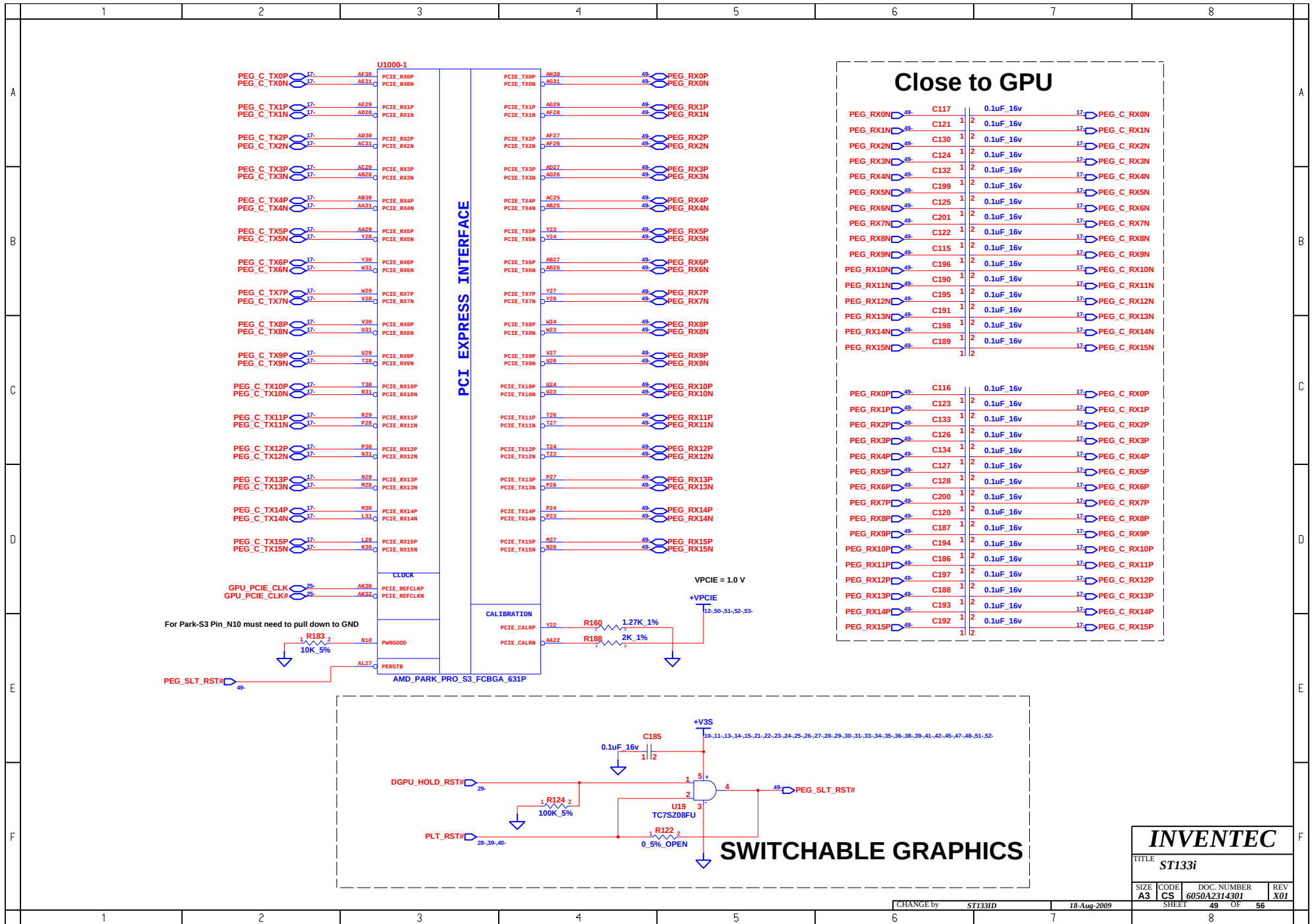
CHANGE by ST133ID 18-Aug-2009

OPTION PART



INVENTEC			
TITLE			
ST133i			
Touchscreen, FP & HD LOCK(Option)			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01
SHEET		48	OF 56

CHANGE by ST133ID 18-Aug-2009

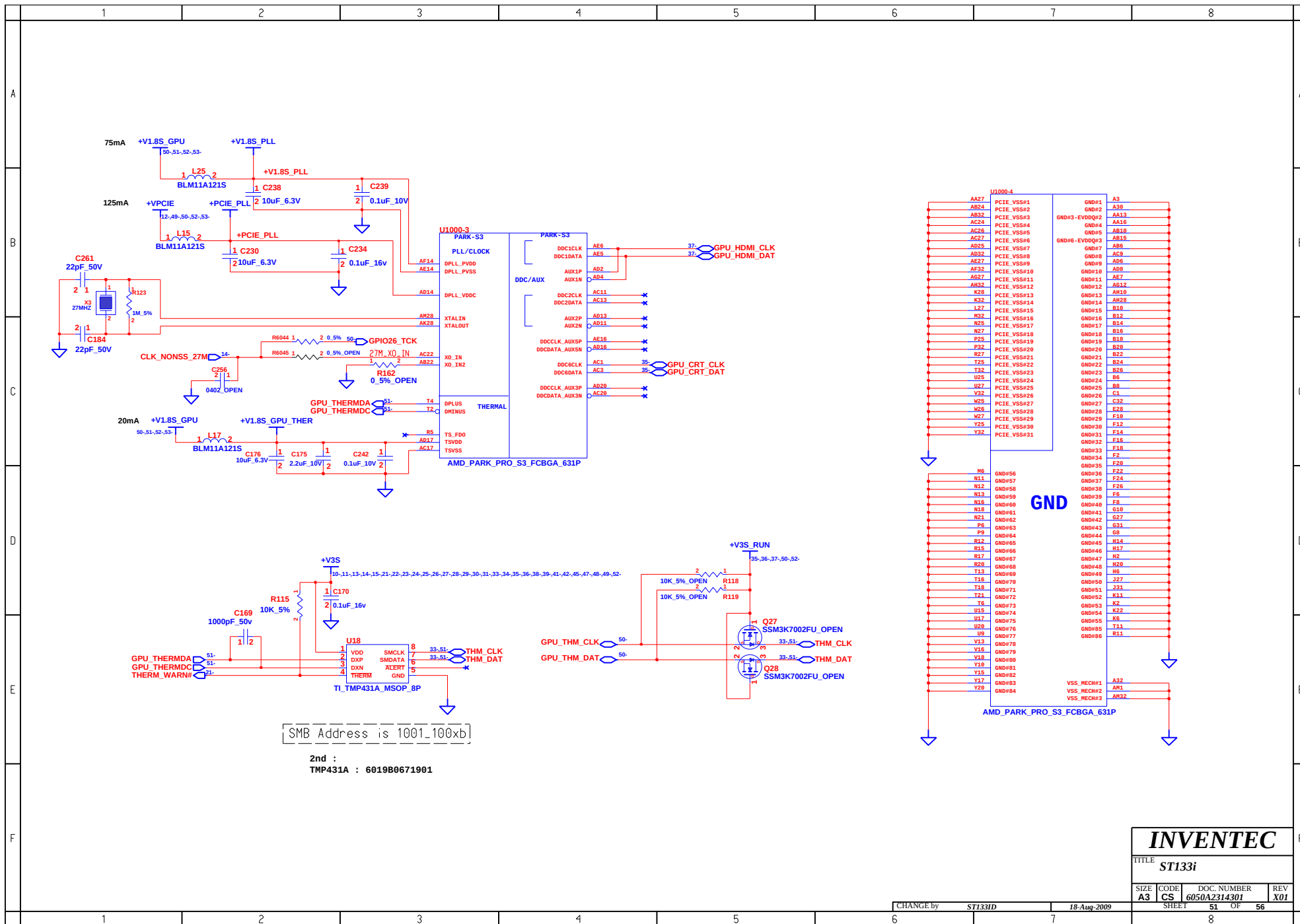


AB

1

1

CHANGE by	ST133ID	18-Aug-2009
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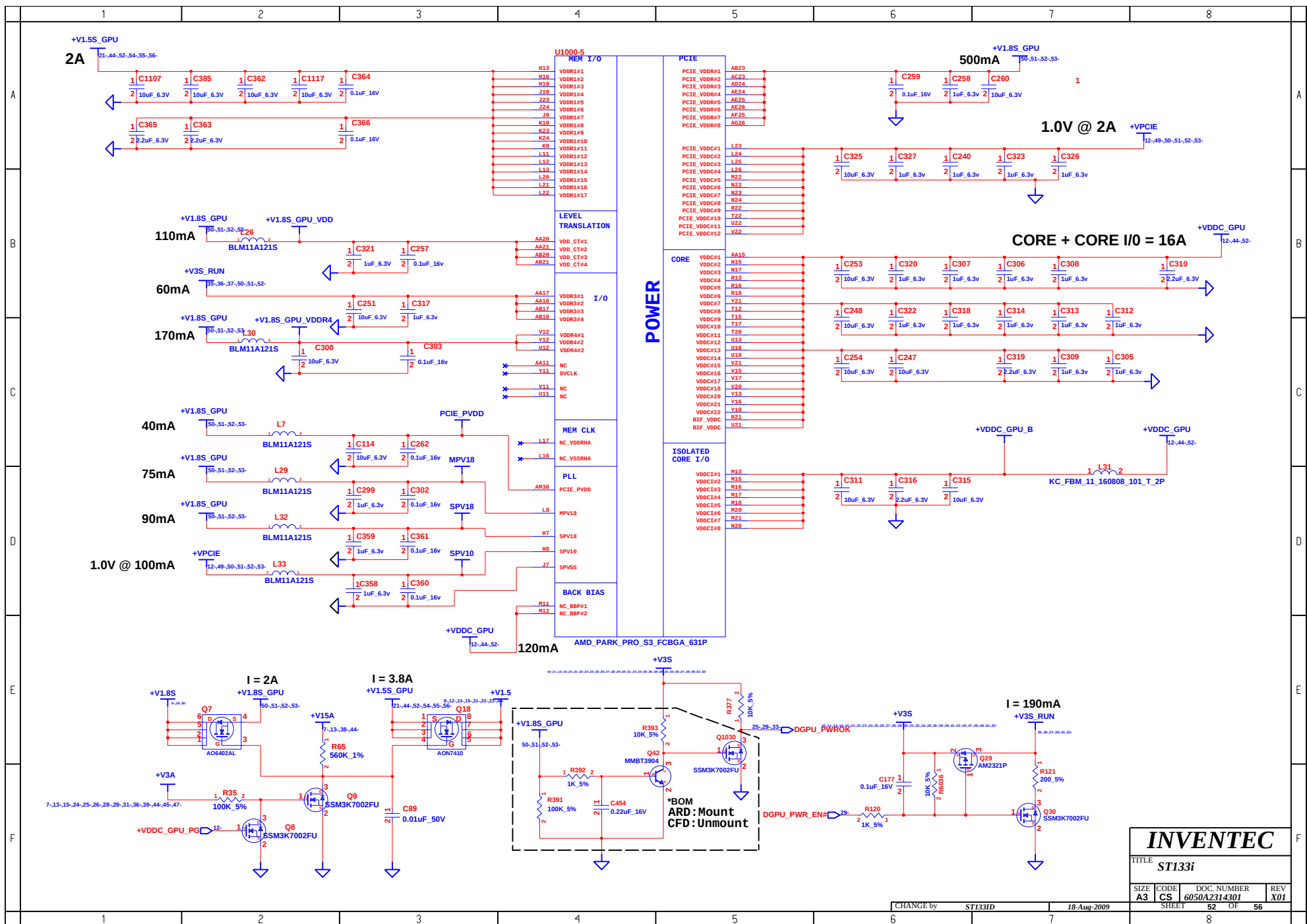
INVENTEC

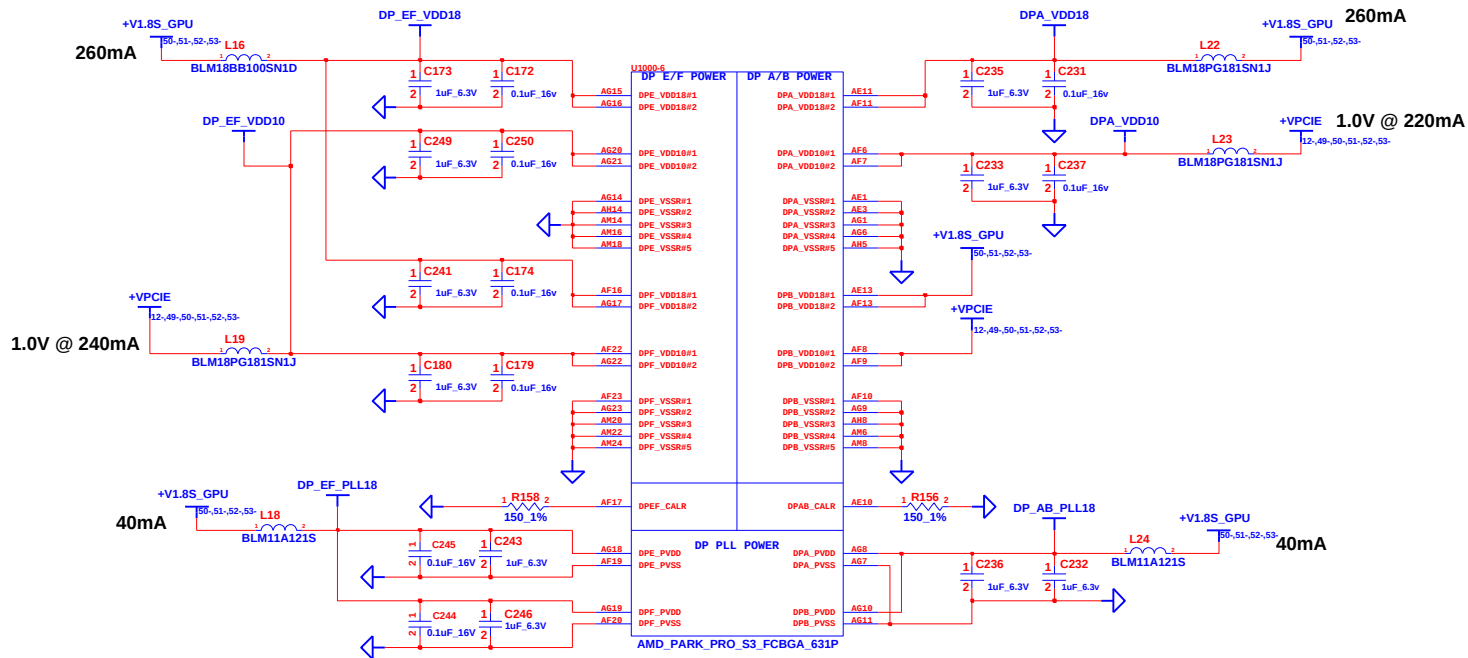
TITLE
ST133i

SIZE CODE DOC. NUMBER REV
A3 CS 6050A2314301 X01

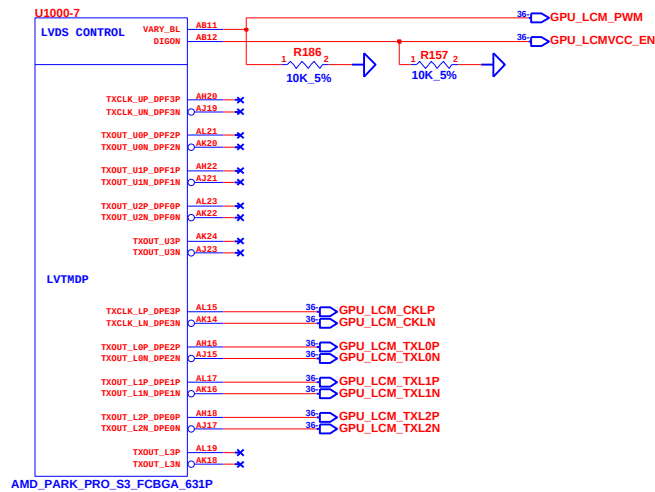
CHANGE by ST133ID 18-Aug-2009

SHEET 51 OF 56





LVDS Interface



INVENTEC

TITLE
ST133i

SIZE	CODE	DOC. NUMBER	REV
A3	CS	6050A2314301	X01

CHANGE by ST133ID 18-Aug-2009

SHEET 53 OF 56

